Council meeting agenda

Metro
600 NE Grand Ave.
Portland, OR 97232-2736

Thursday, April 5, 2018 **2:00 PM** **Metro Regional Center, Council chamber**

1. Call to Order and Roll Call

2. Public Communication

3. Consent Agenda

3.1 Consideration of the Council Meeting Minutes for March 29, 2018 **18-5000**

4. Ordinances (First Reading and Public Hearing)

4.1 Ordinance No. 18-1419, For the Purpose of Amending Metro Code Title 10 to Update the Parks, Cemeteries and Natural Areas Rules and Regulations ORD 18-1419

Presenter(s): Dan Moeller, Metro
Suzanne Piluso, Metro

Attachments: Ordinance No. 18-1419
Exhibit A to Ordinance No. 18-1419
Exhibit B to Ordinance No. 18-1419
Exhibit C to Ordinance No. 18-1419
Exhibit D to Ordinance No. 18-1419
Staff Report
Attachment 1 to Staff Report
Attachment 2 to Staff Report

4.1.1 Public Hearing on Ordinance No. 18-1419

5. Chief Operating Officer Communication

6. Councilor Communication

7. Adjourn

Metro respects civil rights

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Thông báo về sự Metro không kỳ thị của

Metro tôn trọng dân quyền. Muốn biết thêm thông tin về chương trình dân quyền của Metro, hoặc muốn lấy đơn khiếu nại về sự kỳ thị, xin xem trong www.oregonmetro.gov/civilrights. Nếu quý vị cần thông dịch viên ra dấu bằng tay, trợ giúp về tiếp xúc hay ngôn ngữ, xin gọi số 503-797-1700 (từ 8 giờ sáng đến 5 giờ chiều vào những ngày thường) trước buổi họp 5 ngày làm việc.

Повідомлення Metro про заборону дискримінації

Metro з повагою ставиться до громадянських прав. Для отримання інформації про програму Metro із захисту громадянських прав або форми скарги про дискримінацію відвідайте сайт www.oregonmetro.gov/civilrights. або Якщо вам потрібен перекладач на зборах, для задоволення вашого запиту зателефонуйте за номером 503-797-1700 з 8.00 до 17.00 у робочі дні за п'ять робочих днів до зборів.

Metro 的不歧視公告

尊重民權。欲瞭解Metro民權計畫的詳情，或獲取歧視投訴表，請瀏覽網站www.oregonmetro.gov/civilrights。如果您需要口譯方可參加公共會議，請在會議召開前5個營業日撥打503-797-1700（工作日上午8點至下午5點），以便我們滿足您的要求。

Ogeysiiska takooris la'aanta ee Metro

Metro waxay ixtiraamtaa xuquuqda madaniga. Si aad u heshid macluumaad ku saabsan barnaamijka xuquuqda madaniga ee Metro, ama aad u heshid warqadda ka cabashada takoorista, booqo www.oregonmetro.gov/civilrights. Haddii aad u baahan tahay turjubaan si aad uga qaybqaadatid kullan dadweyne, wac 503-797-1700 (8 gallinka hore illaa 5 gallinka dambe maalmaha shaqada) shan maalmo shaqo ka hor kullanka si loo tixgaliyo codsashadaada.

Metro의 차별 금지 관련 통지서

Metro의 시민권 프로그램에 대한 정보 또는 차별 항의서 양식을 얻으려면, 또는 차별에 대한 불만을 신고 할 수www.oregonmetro.gov/civilrights. 당신의 언어 지원이 필요한 경우, 회의에 앞서 5 영업일 (오후 5시 주중에 오전 8시) 503-797-1700를 호출합니다.

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សេចក្តីជូនដំណឹងអំពីការមិនរើសអើងរបស់ Metro

ការគោរពសិទ្ធិពលរដ្ឋរបស់ ។ សំរាប់ព័ត៌មានអំពីកម្មវិធីសិទ្ធិពលរដ្ឋរបស់ Metro ឬដើម្បីទទួលពាក្យបណ្តឹងរើសអើងសូមចូលទស្សនាគេហទំព័រ www.oregonmetro.gov/civilrights។
បើលោកអ្នកត្រូវការអ្នកបកប្រែភាសានៅពេលអង្គប្រជុំសាធារណៈ សូមទូរស័ព្ទមកលេខ 503-797-1700 (ម៉ោង 8 ព្រឹកដល់ម៉ោង 5 ល្ងាច ថ្ងៃធ្វើការ) ប្រាំពីរថ្ងៃថ្ងៃធ្វើការ មុនថ្ងៃប្រជុំដើម្បីអាចឲ្យគេសម្រួលតាមសំណើរបស់លោកអ្នក ។

إشعار بعدم التمييز من Metro

تحترم Metro الحقوق المدنية. للمزيد من المعلومات حول برنامج Metro للحقوق المدنية أو لإيداع شكوى ضد التمييز، يُرجى زيارة الموقع الإلكتروني www.oregonmetro.gov/civilrights. إن كنت بحاجة إلى مساعدة في اللغة، يجب عليك الاتصال مقدماً برقم الهاتف 503-797-1700 (من الساعة 8 صباحاً حتى الساعة 5 مساءاً، أيام الاثنين إلى الجمعة) قبل خمسة (5) أيام عمل من موعد الاجتماع.

Paunawa ng Metro sa kawalan ng diskriminasyon

Iginagalang ng Metro ang mga karapatang sibil. Para sa impormasyon tungkol sa programa ng Metro sa mga karapatang sibil, o upang makakuha ng porma ng reklamo sa diskriminasyon, bisitahin ang www.oregonmetro.gov/civilrights. Kung kailangan ninyo ng interpreter ng wika sa isang pampublikong pulong, tumawag sa 503-797-1700 (8 a.m. hanggang 5 p.m. Lunes hanggang Biyernes) lima araw ng trabaho bago ang pulong upang mapagbigyan ang inyong kahilingan.

Notificación de no discriminación de Metro

Metro respeta los derechos civiles. Para obtener información sobre el programa de derechos civiles de Metro o para obtener un formulario de reclamo por discriminación, ingrese a www.oregonmetro.gov/civilrights . Si necesita asistencia con el idioma, llame al 503-797-1700 (de 8:00 a. m. a 5:00 p. m. los días de semana) 5 días laborales antes de la asamblea.

Уведомление о недопущении дискриминации от Metro

Metro уважает гражданские права. Узнать о программе Metro по соблюдению гражданских прав и получить форму жалобы о дискриминации можно на веб-сайте www.oregonmetro.gov/civilrights. Если вам нужен переводчик на общественном собрании, оставьте свой запрос, позвонив по номеру 503-797-1700 в рабочие дни с 8:00 до 17:00 и за пять рабочих дней до даты собрания.

Avizul Metro privind nediscriminarea

Metro respectă drepturile civile. Pentru informații cu privire la programul Metro pentru drepturi civile sau pentru a obține un formular de reclamație împotriva discriminării, vizitați www.oregonmetro.gov/civilrights. Dacă aveți nevoie de un interpret de limbă la o ședință publică, sunați la 503-797-1700 (între orele 8 și 5, în timpul zilelor lucrătoare) cu cinci zile lucrătoare înainte de ședință, pentru a putea să vă răspunde în mod favorabil la cerere.

Metro txoj kev ntxub ntxaug daim ntawv ceeb toom

Metro tributes cai. Rau cov lus qhia txog Metro txoj cai kev pab, los yog kom sau ib daim ntawv tsis txaus siab, mus saib www.oregonmetro.gov/civilrights. Yog hais tias koj xav tau lus kev pab, hu rau 503-797-1700 (8 teev sawv ntxov txog 5 teev tsaus ntuj weekdays) 5 hnub ua hauj lwm ua ntej ntawm lub rooj sib tham.

February 2017

Television schedule for Metro Council meetings

Clackamas, Multnomah and Washington counties, and Vancouver, WA Channel 30 – Community Access Network *Web site*: www.tvctv.org *Ph*: 503-629-8534 Call or visit web site for program times.	**Portland** Channel 30 – Portland Community Media *Web site*: www.pcmtv.org *Ph*: 503-288-1515 Call or visit web site for program times.
Gresham Channel 30 - MCTV *Web site*: www.metroeast.org *Ph*: 503-491-7636 Call or visit web site for program times.	**Washington County and West Linn** Channel 30– TVC TV *Web site*: www.tvctv.org *Ph*: 503-629-8534 Call or visit web site for program times.
Oregon City and Gladstone Channel 28 – Willamette Falls Television *Web site*: http://www.wftvmedia.org/ *Ph*: 503-650-0275 Call or visit web site for program times.	

PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times. Agenda items may not be considered in the exact order. For questions about the agenda, call the Metro Council Office at 503-797-1540. Public hearings are held on all ordinances second read. Documents for the record must be submitted to the Regional Engagement and Legislative Coordinator to be included in the meeting record. Documents can be submitted by e-mail, fax or mail or in person to the Regional Engagement and Legislative Coordinator. For additional information about testifying before the Metro Council please go to the Metro web site www.oregonmetro.gov and click on public comment opportunities.

Agenda Item No. 3.1

Consideration of the Council Meeting Minutes for March 29, 2018

Consent Agenda

Metro Council Meeting
Thursday, April 5, 2018
Metro Regional Center, Council Chamber

Agenda Item No. 4.1

Ordinance No. 18-1419, For the Purpose of Amending Metro Code Title 10 to Update the Parks, Cemeteries and Natural Areas Rules and Regulations

Ordinances (First Read)

Metro Council Meeting
Thursday, April 5, 2018
Metro Regional Center, Council Chamber

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING METRO CODE TITLE 10 TO UPDATE THE PARKS, CEMETERIES AND NATURAL AREAS RULES AND REGULATIONS	)))	ORDINANCE NO. 18-1419 Introduced by Chief Operating Officer Martha Bennett in concurrence with Council President Tom Hughes

WHEREAS, rules and regulations governing use of Metro parks, cemeteries and natural areas are set forth in Title 10 of the Metro Code; and

WHEREAS, Metro Code Title 10 has not been comprehensively reviewed and updated since its initial adoption in 1996, it contains provisions are no longer relevant or necessary, and in some places it contains duplicative and contradictory provisions; and

WHEREAS, since the adoption of Title 10, Metro's portfolio of parks and natural areas has significantly expanded, and the Parks and Nature department has reorganized, resulting in changes in the operation and management of Metro's parks, cemeteries, and natural areas; and

WHEREAS, there is a need for regulations governing use of Metro's parks, cemeteries, and natural areas to address new and emerging uses of Metro properties that were not contemplated at the time Title 10 was drafted, nor in subsequent amendments; and

WHEREAS, the Metro Council adopted the Parks and Nature System Plan in 2016, which formally established and clarified Metro's role in the region and its mission of protecting water quality, fish and wildlife habitat, and creating opportunities for the public to enjoy nature close to home through a connected system of parks, trails and natural areas; and

WHEREAS, there is public interest in allowing new uses or expanded certain uses of parks and natural area properties owned or operated by Metro, such as allowing hunting, dogs and other domestic animals, or operation of unmanned aircraft (i.e., drones) at Metro owned or operated parks and natural areas; and

WHEREAS, Metro must balance its commitment to both protecting natural resources and providing for public use of its properties; and

WHEREAS, smoking at Metro parks and natural areas poses health risks to all users through secondhand smoke (especially children and pregnant women), smoking waste products produce significant litter and pollutants that can be consumed by wildlife and affect water quality, and cigarettes and other smoking materials present serious fire risks; and

WHEREAS, the Metro Council adopted Resolution No. 11-4262 adopting a tobacco-free grounds policy, and the Parks and Nature department has not yet implemented this policy at its parks, cemeteries, natural areas; and

WHEREAS, in order to provide notice to the public to transition to a smoke-free environment at Metro's parks, cemeteries, and natural areas, it is prudent to allow flexibility and time for the proposed rule to take effect; and

WHEREAS, Metro Code Title 10 sets forth fees that apply to certain properties or activities, requiring an amendment to the Metro Code for any fee adjustment, which is unnecessarily burdensome and inconsistent with how other Metro departments set and adjust fees; and

WHEREAS, proposed substantive amendments to Title 10 include allowing domestic animals on regional trails traversing Metro properties and at most Metro boat ramps; prohibiting operation of unmanned aircraft (i.e., drones); prohibiting smoking at Metro parks and natural areas after a one-year policy implementation period; delegating the authority to set and adjust fees to the Chief Operating Officer; and limiting the periods for exclusions from parks, cemeteries, and natural areas to no more than one year; and

WHEREAS, the proposed amendments preserve the ability of Metro to approve uses that are prohibited by Title 10 on a case-by-case basis by special use permit; and

WHEREAS, the proposed updates to Metro Code Title 10 reorganizes and renumbers most of the chapters and provisions within them, which will improve ease of reference for Metro staff, local government partners (especially those involved in helping to enforce Metro rules), and the public at large, improving Metro's transparency; and

WHEREAS, staff engaged in thoughtful outreach regarding proposed amendments to Title 10, including hiring an outside consultant to convene a "Sounding Board," which represented diverse perspectives on these issues; the Sounding Board volunteers looked closely at existing parks, cemetery and natural area rules to provide input to staff on current policies and potential adjustments; and

WHEREAS, the Metro Council finds that the amendments to Metro Code Title 10 further the public good and the needs of Metro; now therefore,

THE METRO COUNCIL ORDAINS AS FOLLOWS:

1. Metro Code Title 10 is amended as set forth in Exhibit A, B, and C attached to this Ordinance.
2. The Chief Operating Officer is directed to begin enforcement of the smoking prohibition set forth in the revised Metro Code Section 10.03.200 after April 12, 2019.

ADOPTED by the Metro Council this 12th day of April, 2018.

Tom Hughes, Council President

Attest:

Approved as to Form:

Nellie Papsdorf, Recording Secretary

Alison R. Kean, Metro Attorney

EXHIBIT A TO ORDINANCE NO. 18-1419

TITLE X

METRO PARKS, CEMETERIES AND NATURAL AREAS

~~CHAPTERS~~ ~~TITLE~~

CHAPTER 10.01

DEFINITIONS

10.01.02~~1~~0 Definitions

~~As used in this chapter,~~For the purposes of Title X Metro Parks, Cemeteries and Natural Areas, unless the context requires otherwise, the following terms have the meanings given to them in this Chapter:

Cemetery, Historic Cemeteries, and Cemeteries means the places identified in Section 10.05.040 that are designated, owned and operated by Metro for the disposition of Human Remains (as defined in Section 10.05.030).

~~(b) "~~**Director**~~"~~ means the person or persons designated by the Chief Operating Officer to serve as the Director of the ~~Metro's~~ Parks and Nature Department, or the Director's designee.

~~(i) "Parks and Nature Department e~~**Employee**~~"~~ means any paid employees ~~of the Parks and Nature Department, any other paid employees of~~ Metro performing tasks or functions at any Property~~park~~ at the request or direction of either the Chief Operating Officer or his or her designee, ~~Director~~ or the Metro Council~~, volunteers performing functions and duties assigned or authorized by the Director, and any contractors or agents of the Parks and Nature Department carrying out their duties or obligations to the Parks and Nature Department~~.

Natural Area(s) means any Property managed for purposes of habitat conservation and restoration, including Properties used seasonally for agricultural use complementary to habitat conservation.

Noise disturbance means any sound which injures or endangers the safety or health of humans, annoys or disturbs a reasonable person of typical sensitivities, or harms wildlife.

~~(d) "~~**Park(s)**~~"~~ means any Property improved for purposes of recreation, including ~~forest, reservation, playground, beach, natural area, recreation center, cemetery, or any other similar area owned, operated or managed by Metro, through its Parks and Nature Department, and devoted to active or~~ passive recreation, and open for public use, including regional recreation areas, regional nature parks, and motorized and non-motorized boat launches or ramps.

Parks and Nature Department means Metro's Parks and Nature Department, as the department may be renamed or reorganized from time to time.

Permit means any type of special event, use, camping, or reservation permit issued by Metro.

~~(f) "~~**Person**~~"~~ ~~shall~~ has~~ve~~ the meaning ~~assigned thereto~~set forth in Metro Code Section 1.01.040(~~f~~h).

Property means land or interests in land owned by Metro and managed by the Parks and Nature Department, including Cemeteries, Parks, and Natural Areas.

Property Rules or Property-Specific Rules means a Rule established by the Director for a specific Property.

~~**(g) "Public"**~~ means any person other than a ~~Parks and Nature Department~~Metro elected official, officer, ~~e~~Employee, volunteer, contractor or other agent while on duty.

Regional Trail means a pedestrian off-street trail identified on Metro's Regional Trails and Greenways map and found on Metro's website as a Regional Trail.

~~**(e) "Park r**~~**Rule(s)**~~"~~ means rules and regulations adopted by the Director pursuant to Metro Code Title X~~Section 10.01.040 of this chapter~~.

Title X refers to this Title X of the Metro Code (Metro Parks, Cemeteries and Natural Areas).

~~**(h) "Vehicle"**~~ means any wheeled conveyance, whether motor-powered, animal-drawn or self-propelled, including a bicycle, and includes any trailer in tow of any size, kind or description, but does not include (a) baby carriages or strollers, (b) vehicles in the service of the ~~Metro~~ Parks and Nature Department, or (c) manually operated or power-driven devices used for locomotion by an individual with a mobility disability.

(Ordinance 96-659A, Sec. 1.; Ordinance 02-978, Sec. 1.; Ordinance 15-1366.)

CHAPTER 10.02

PERMITS, ENFORCEMENT AND APPEALS

10.0~~1~~2.010 ~~-~~Purpose

The purpose of this ~~chapter~~Title X is to provide ~~for~~rules and regulations governing the use of Metro's ~~-owned or operated~~ Parks, Cemeteries and Nature~~a~~l Areas ~~facilities~~ by members of the public, in order to ~~provide~~ protect ~~ion for~~lands, habitat, wildlife, plants and ~~property~~improvements, ~~and to protect the safety and~~to provide for the safety of employees and visitors, and to further the enjoyment of any person visiting these facilities. Additional rules and regulations governing Cemeteries are set forth in Chapter 10.05.
(Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.~~01.030~~02.020 ~~-~~Policy

The Metro Council has determined that it is necessary to adopt these Code provisions in order to ~~insure~~further the safe and efficient operation, protection and maintenance of Metro's Parks, Cemeteries and Natural Areas and to protect the health, safety and welfare of the public and Metro's employees; therefore, ~~this chapter~~Title X ~~shall~~will be liberally construed to effectuate this purpose.
(Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.~~01.040~~02.030~~-~~ Enforcement Authority~~/Park Rules~~

(a) The Director ~~shall~~ has~~ve~~ the authority to enforce all of the provisions of ~~this chapter~~Title X, including but not limited to the authority to enforce any ~~park r~~Rules adopted pursuant to this ~~chapter~~Section.

(b) The Director ~~shall~~ has~~ve~~ the authority to ~~adopt park~~establish ~~r~~Rules ~~which~~that are not inconsistent with the provisions of ~~this chapter~~Title X, including but not limited

to, ~~park~~ rules governing fees and penalties, Property-Specific Rules, and rules governing Interment and Inurnment, as defined in Chapter 10.05. ~~Park~~Said rules ~~shall~~must be in writing, ~~shall be~~ posted on Metro's website ~~as otherwise required by this chapter,~~ and ~~shall be~~ filed with the Metro Council.

(c) No person ~~shall~~may violate any ~~park r~~Rule established ~~which has been adopted~~ by the Director ~~pursuant to this chapter~~.
(Ordinance 96-659A, Sec. 1.)

10.02.040 Exceptions; Authorized Acts by Permit
Notwithstanding anything to the contrary in Title X, the following are not violations of Title X or of any Rules:

(a) The acts of Metro elected officials and Employees constituting official duties.

(b) The authorized acts of Metro-approved volunteers.

(c) The acts of agents and contractors authorized by agreement with Metro.

(d) Acts of third parties or the public officially authorized by agreement with Metro, or by Permit.

~~10.01.360~~02.050 ~~Special Use~~ Permits Required
No person may, within the boundary of any Property, conduct or participate in any activity for which a Permit is required, unless Metro has issued a Permit for the activity. A ~~special use~~ permit ~~shall be obtained prior to pursuing~~is required under the following circumstances and for the following activities ~~in any park~~:

(a) ~~Movie, commercial~~Film or television filming, ~~photography and~~ production, or commercial photography.

(b) Any organized sporting event or competition, including but not limited to team sports, ~~F~~fishing, water-skiing, disc golf, wakeboarding, track and field, triathlon or duathlon~~any other organized sporting event~~.

(c) Special educational events or festivals, except those specifically hosted by Metro.

(d) Amplified sound, pony rides, dunk tanks, ~~use of alcohol with a reservation permit or any other type of special use~~or carnival games.

(e) Consumption of alcohol in designated locations.

(f) Landing of helicopters, small planes, sea planes, float planes or similar.

(g) Camping overnight or longer.

(~~e~~h) Any ~~other~~ organized event or activity involving 25 persons or more, except for picnics where a reservation has been secured.

(i) Any event where the person or persons engaged in the activity seek to exclude, or to have the right to exclude, any member of the public from the activity or from any area of any Property. For example, a reservation is required for a picnic shelter if the

person making the reservation seeks to exclude other members of the public from the shelter during the period of the reservation.

(j) Any activity which is otherwise prohibited by this Metro Code Chapter 10.02.

(k) Any use of Historic Cemeteries other than as described in Metro Code Section 10.05.070.

(Ordinance 96-659A, Sec. 1.)

10.~~01.370~~02.060 ~~-~~Permit Revocation

Any Permit granted hereunder may be revoked at the discretion of the Director or his/her designee, with a full refund. ~~The~~If the Director ~~or his/her designee shall have the authority to~~ revokes a ~~p~~Permit under this Section upon a finding of violation of Title X, or any ~~r~~Rule, ordinance, statute, or ~~any special use or reservation permit provision~~conditions of the Permit, no refund may be given.

(Ordinance 96-659A, Sec. 1.)

10.~~01.270~~02.070 ~~- Exhibiting~~Display of Permits Required

~~No~~It is unlawful for any person ~~shall~~to:

(a) Fail to produce and ~~exhibit~~display any required Metro ~~p~~Permit or receipt, ~~from the Director the person claims to have,~~ upon request of any ~~authorized enforcement personnel or park e~~Employee or agent of Metro~~who shall desire to inspect the permit for purpose of enforcing compliance with any ordinance or rule~~.

(b) Fail to clearly display at all times, while within the boundaries of any Property~~park~~, any required proof of ~~entrance and /or~~ parking fee payment or waiver on the dashboard of the person's vehicle so that such proof is plainly visible from the exterior of the vehicle.

(Ordinance 96-659A, Sec. 1.)

10.~~01.280~~02.080 ~~-~~Interference with Permittees Prohibited

No person ~~shall~~may disturb or interfere unreasonably with any person or party occupying ~~any park area~~ or participating in any activity in a Property ~~park~~ under the authority of a ~~p~~Permit. Unreasonable interference includes, but is not limited to, conduct that substantially prevents any person from viewing or hearing the permitted activity, or substantially preventing the free passage, ingress and egress of event participants or attendees.

(Ordinance 96-659A, Sec. 1.)

10.~~01.320~~02.090 ~~-~~Posting of ~~Park~~ Rules

~~The~~ Rules and provisions for use and administration of ~~p~~Parks, Cemeteries and Natural Areas, must be in writing, and made reasonably available to the public by, for example and in the discretion of the Director, posting on Metro's website, keeping a copy at each Property office for inspection, posting signage, or by displaying as otherwise required by this Chapter. ~~notice of those rules or summaries of those Rules shall be kept posted within~~

~~the main entrance of each park or at suitable other locations.~~
(Ordinance 96-659A, Sec. 1.)

10.01.39002.100- Enforcement Personnel

(a) The Director and the Director's authorized representatives ~~shall~~must, in connection with their duties imposed by law, diligently enforce the provisions of ~~this chapter~~Title X and any Rules.

(b) It is unlawful for any~~No~~ person ~~shall~~to harass, obstruct, interfere with or disobey the direction of any authorized ~~enforcement personnel or park~~Metro employee or agent carrying out the enforcement of ~~this chapter~~Title X or any ~~r~~Rules ~~adopted under this chapter~~. (Ordinance 96-659A, Sec. 1.)

10.01.40002.110 -Citation, Ejectment and Exclusion, Hearing

~~The Director and authorized enforcement personnel shall:~~

(a) The Director and the Director's authorized enforcement personnel ~~H~~have the authority to: ~~arrest,~~ cite ~~in lieu of arrest~~, cite for civil penalties or eject from ~~the park~~any Property any person acting in violation of Title X, any Rules, ~~this chapter~~ or the laws of the State of Oregon.

(b) ~~Exclude from the park any person acting in violation of this chapter or the laws of the State of Oregon.~~Written notice must be given to any person excluded from Metro Property. The notice must specify the violation of Title X, the Rule violated, or the law of the State of Oregon that is the basis for the exclusion and must specify the dates covered by the exclusion. The notice must contain a statement of the person's right to request a hearing and to be represented by legal counsel. The notice must be signed by the issuing party. The consequences of failing to comply with the exclusion notice must be prominently displayed on the notice.

(c) ~~Exclusions exceeding one (1) year shall be approved by the Director.~~A person receiving an exclusion notice may request a hearing to appeal the exclusion by sending a written request for a hearing to the Director by registered or certified mail.

(d) At any time during the period of the exclusion, a person receiving an exclusion notice may apply in writing to the Director for a temporary waiver from the exclusion. The Director may grant a temporary waiver of an exclusion based upon a showing of good cause for said waiver.

(Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.01.41002.120- Seizure of Property

The Director and any authorized enforcement personnel ~~shall~~ has~~ve~~ the authority to seize and confiscate any property, thing or device held, kept or used ~~including but not limited to motor vehicles and chain saws, used~~ in violation of ~~this chapter~~Title X or any Rule.
(Ordinance 96-659A, Sec. 1.)

10.01.42002.130- Hearing Regarding Seized Property

(a) Persons who have had any personal property, thing or device confiscated under this Chapter Section 10.01.410 may request a hearing to appeal the confiscation by sending a written request for hearing to the Director by registered or certified mail.

(b) The hearing shall be conducted in accord with the applicable contested case procedures set forth in the Metro Code Chapter 2.05.

(c) Any property, thing or device which was not wrongfully confiscated shallwill become the property of Metro and shallmay be disposed of in a manner to be determined by the Director. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.01.43002.140- Other Laws Applicable

Title X and the Rules adopted in its authority areThis chapter shall in no way be a substitute for and do not or eliminate the necessity of conforming with any and all state laws and rules and other ordinances which are now or may be in the future in effect which relate to the activities regulated in this chapterTitle X, including but not limited to City or County ordinances containing regulations and prohibitions pertaining to firearms and dangerous or deadly weapons. (Ordinance 96-659A, Sec. 1.; Ordinance 10-1230, Sec. 4)

10.01.44002.150- Severability

If any section, subsection, sentence, clause, phrase or portion of this chapterTitle X is for any reason held invalid or unconstitutional by a court of competent jurisdiction, that portion shall be considered a separate, distinct and independent provision, and the holding shallwill not affect the validity of the remaining portion of this chapterTitle X. (Ordinance 96-659A, Sec. 1.)

CHAPTER 10.01~~1~~3

~~METRO PARKS~~RULES AND ~~NATURE~~ REGULATIONS

~~Section Title~~

~~10.01.240 Fires Limited~~
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~~10.01.270 Exhibiting Permits Required~~
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~~10.01.300 Signs Restricted~~
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~~10.01.320 Posting of Park Rules~~
10.~~01.330~~03.290 Closed Areas
~~10.01.340 Lost and Found Articles~~
~~10.01.350 Permits for Camping, Group Picnics and Vending~~
~~10.01.360 Special Use Permit~~
~~10.01.370 Permit Revocation~~
~~10.01.380 Boats and Moorages~~
~~10.01.390 Enforcement Personnel~~
~~10.01.400 Citation, Ejectment and Exclusion, Hearing~~
~~10.01.410 Seizure of Property~~
~~10.01.420 Hearing Regarding Seized Property~~
~~10.01.430 Other Laws Applicable~~
~~10.01.440 Severability~~

Repealed

10.01.600 Penalties
(Repealed Ordinance 15-1366.)

10.01.610 Bail and Fine Collection
(Repealed Ordinance 15-1366.)

10.01.010 Purpose

The purpose of this chapter is to provide for regulations governing the use of Metro owned or operated Parks and Nature facilities by members of the public in order to provide protection for wildlife, plants and property, and to protect the safety and enjoyment of any person visiting these facilities. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.01.020 Definitions

As used in this chapter, unless the context requires otherwise:

(a) "Council" shall have the meaning assigned thereto in Metro Code Section 1.01.040(a).

(b) "Director" means the person or persons designated by the Chief Operating Officer to serve as the Director of Metro's Parks and Nature Department or the Director's designee.

(c) "Metro Code" means the Code of Metro.

(d) "Park" means a forest, reservation, playground, beach, natural area, recreation center, cemetery, or any other similar area owned, operated or managed by Metro, through its Parks and Nature Department, and devoted to active or passive recreation.

(e) "Park rules" means rules adopted by the Director pursuant to Section 10.01.040 of this chapter.

(f) "Person" shall have the meaning assigned thereto in Metro Code Section 1.01.040(f).

(g) "Public" means any person other than a Parks and Nature Department employee.

(h) "Vehicle" means any wheeled conveyance, whether motor-powered, animal-drawn or self-propelled, including a bicycle, and includes any trailer in tow of any size, kind or description, but does not include baby carriages or vehicles in the service of Metro Parks and Nature.

(i) "Parks and Nature Department employee" means any paid employees of the Parks and Nature Department, any other paid employees of Metro performing tasks or functions at any park at the request or direction of either the Director or the Metro Council, volunteers performing functions and duties assigned or authorized by the Director, and any contractors or agents of the Parks and Nature Department carrying out their duties or obligations to the Parks and Nature Department. (Ordinance 96-659A, Sec. 1.; Ordinance 02-978, Sec. 1.; Ordinance 15-1366.)

10.01.030 Policy

The Council has determined that it is necessary to adopt these Code provisions in order to insure the efficient operation, protection and maintenance of Metro's Parks and to protect the health, safety and welfare of the public; therefore, this chapter shall be liberally construed to effectuate this purpose. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

~~10.01.040 Enforcement Authority/Park Rules~~

~~(a) The Director shall have the authority to enforce all of the provisions of this chapter, including but not limited to the authority to enforce any park rules adopted pursuant to this chapter.~~

~~(b) The Director shall have the authority to adopt park rules which are not inconsistent with the provisions of this chapter, including but not limited to park rules governing fees. Park rules shall be in writing, shall be posted as otherwise required by this chapter, and shall be filed with the Metro Council.~~

~~(c) No person shall violate any park rule which has been adopted by the Director pursuant to this chapter.~~ ~~(Ordinance 96-659A, Sec. 1.)~~

10.~~01.050~~03.010 ~~Park~~ Property Destruction and Other Property Prohibitions
~~No person shall, w~~Within the boundaries of any ~~Park~~Property, it is unlawful to:

(a) Willfully mark, deface, disfigure, ~~injure~~damage, tamper with, displace or remove any property, improvements, fixtures, or equipment, including buildings, rest-rooms, bridges, tables, benches, grills, fireplaces, railings, fences, gates, paving or paving material, water lines or other public utilities or parts or appurtenances thereof, signs, notices or placards~~,~~ (whether temporary or permanent), monuments, stakes, posts or other boundary markers, other structures or equipment, ~~recreation facilities or park~~ property or appurtenances whatsoever, either real or personal.

(b) Dig or remove any soil, rock, gravel, stones, ~~trees, shrubs~~ or ~~plants, down timber or other wood or materials~~artifacts, or make any excavation by tool, equipment, blasting or other means or agency, including on land or in streams.

(c) ~~Damage or destroy any park tree, shrub, plant, structure or appurtenance through the use of a motor vehicle, whether intentional or not.~~Climb, scale, walk, stand, swing, or sit upon monuments, rock walls, planters, fountains, railings, fences or any other feature within a Property that is not designated or customarily used for such purposes.

(d) Fail to stay on designated trails, paths or roads.

(e) Construct, install, add to, remove, maintain, or alter any trail, path, truck, fence, gate, course, route, bridge, overpass, culvert or crossing, or construct structures on a Property, such as tree forts or camps.

(~~d~~f) Use any metal or mineral locating or detecting devices of any kind. (Ordinance 96-659A, Sec. 1.)

10.~~01.060~~03.020 Tree~~s, Shrubbery and Lawns~~ and Plant Prohibitions
~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to:

(a) Damage, cut, carve, trim, prune, transplant, remove or destroy any tree, shrub, ~~or~~ plant, or seeds, or any part of any tree, shrub or plant, regardless of whether the tree, shrub or plant is dead or alive, including without limitation, damage such

vegetation through use of a vehicle, whether the damage is intentional or not, or remove wood for firewood. Use of chain saws is prohibited.

(b) Climb, scale or swing upon any trees or shrubs ~~or walk, stand or sit upon monuments, vases, fountains, railing, fences or upon any other property~~ not designated ~~or customarily used~~ for ~~those~~such purposes.

(c) Plant any tree or shrub or other plant on a Property~~in a park or cemetery area without the written permission of the Director.~~ (Ordinance 96-659A, Sec. 1.)

10.~~01.070~~03.030 ~~-~~Animals, Birds and Fish Prohibitions

~~No person shall, within the boundaries of any park:~~

(a) Within the boundaries of any Property, except as stated in Sections (e), (f), and (g) below, it is unlawful to ~~H~~hunt, ~~molest~~harass, harm, poison, frighten, kill, trap, chase, shoot, project, or throw ~~missiles~~projectiles at, any bird, fish or other living creature, or remove or have in possession any wild animal, bird, fish, amphibian, invertebrate, or reptile or the eggs or nest of any reptile or bird, or obtain access to or cross any Property with the intent to hunt or trap on adjacent lands. Posession of relevant equipment will be deemed sufficient evidence of such intent. ~~However, angling is permitted in designated areas in accordance with applicable rules and regulations as promulgated by the Oregon Department of Fish & Wildlife.~~

(b) ~~Give or offer to give to any animal or bird any tobacco, alcohol or other noxious substances.~~It is unlawful, within the boundaries of any Property, to feed or offer food items to any wildlife or fish.

(c) It is unlawful, within the boundaries of any Property, to release any plant, fish, wildlife, aquarium contents, or other living organism.

(d) It is unlawful, within the bounds of any Property, to place waterfowl decoys or use recorded birdsong, playback, calls, or other audio or mechanical method of attracting birds or other wildlife.

(e) Acts of employees of federal and state agencies, including the United States Fish and Wildlife Service, United States Geologic Society, and Oregon Department of Fish and Wildlife, while performing their official duties will not be deemed a violation of this Section.

(f) Fishing is permitted only where designated by a Property-Specific Rule, and in accordance with applicable rules and regulations promulgated by the Oregon Department of Fish and Wildlife (subject to prohibitions on dangerous weapons set forth in Section 10.03.170, below).

(g) The Director may establish Property-Specific Rules that allow hunting on a limited basis in conformance with federal and state law if the Director finds that it is necessary and beneficial to conservation efforts to control animal populations. (Ordinance 96-659A, Sec. 1.)

10.~~01.080~~03.040 ~~-~~Pollution of Waters and Soils Prohibited

It is unlawful for ~~No~~ any person ~~shall throw~~to bury, release, discharge or otherwise place or

cause to be placed in the soils ~~of any Metro park~~ or waters of any fountain, pond, lake, river, stream, bay or other body of water in or adjacent to any ~~park~~Property, any matter or thing, liquid, gas, or solid, which will or may result in the pollution of those waters or soils, including, without limitation, urination or defecation on any Property except in designated restrooms. (Ordinance 96-659A, Sec. 1.)

10.~~01.090~~03.050 ~~-~~Refuse and Trash Prohibitions

It is unlawful for any ~~No~~ person ~~shall~~to deposit, dump, place or leave any rubbish, bottles, cans, garbage or refuse of any type regardless of its source in a ~~park area~~Property, except refuse, garbage or litter occasioned through lawful use of the Property ~~those areas~~ which must ~~shall~~ be deposited in ~~refuse~~appropriate receptacles provided for that purpose. (Ordinance 96-659A, Sec. 1.)

10.~~01.100~~03.060 Traffic Prohibitions

~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to:

(a) Fail to comply with all applicable provisions of the state motor vehicles traffic laws in regard to equipment and operation of vehicles together with such regulations as are contained in ~~this chapter~~Title X, any Rule, and other ordinances.

(b) Fail to obey ~~all authorized enforcement personnel and park e~~Employees and agents, which persons hereby are authorized and instructed to direct traffic whenever and wherever needed ~~in the parks~~on any Property and on the highways, streets or roads immediately adjacent to ~~the parks in accordance with the provisions of this chapter and such supplementary rules as may be issued by the Director~~any Property.

(c) Fail to observe and obey all traffic signs indicating speed, direction, caution, stopping or parking, and all other signs posted for proper traffic control and to safeguard life and property.

(d) Drive any motor vehicle, including all-terrain vehicles (ATVs), on any area except ~~the park~~ roads, ~~or~~ parking areas, or such other areas as may be specifically designated by the Director. (Ordinance 96-659A, Sec. 1.)

10.~~01.110~~03.070 Parking Prohibitions

~~No person shall, w~~Within the boundaries of any Property, it is unlawful to:

(e) Park a motor vehicle in a location other than an established or designated parking area or in violation of ~~not comply with~~ the posted ~~directions and with instructions of any attendant~~signage or identified restrictions, or against instruction of an Employee or agent who may be present at an established or designated parking area.

(f) Double park any motor vehicle on a road or parkway ~~unless directed by a park attendant~~, or otherwise park any vehicle such that a vehicle prevents the egress of other vehicles, or park in front of or block a fire lane or Property entry or exit gate, unless directed by an employee or agent of Metro.

(g) Leave any vehicle parked in any ~~park area~~Property after normal ~~park~~ operation hours without first obtaining permission from ~~authorized enforcement personnel~~an Employee or agent of Metro.

(h) Leave any vehicle parked or stopped on a boat ramp except while loading or unloading a boat. Vehicles so parked are subject to citation and tow. (Ordinance 96-659A, Sec. 1.)

10.~~01.120~~03.080 ~~-~~Bicycle Restrictions

~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to:

(a) Ride a bicycle on other than a vehicular road, trail or path specifically design~~ed~~ated and signed for that purpose. A bicyclist ~~shall be~~is permitted to wheel or push a bicycle by hand in a Park over any ~~grassy~~mowed area or ~~wooded trail~~ natural surface or on any paved area reserved for pedestrian use.

(b) Ride a bicycle other than on the right-hand side of the road paving as close as conditions permit. Bicycles ~~shall~~must be ~~kept~~ in single file when two (2) or more are operating as a group. Bicyclists ~~shall~~must at all times operate their bicycles with reasonable regard to the safety of others, signal all turns, ~~pass to the right of any vehicle they are overtaking~~ and pass to the right of any vehicle~~s~~ they ~~may be~~are meeting or overtaking.

~~(c) Ride a bicycle on any road between 30 minutes after sunset and 30 minutes before sunrise without an attached headlight plainly visible at least 200 feet in front of, and without a red taillight or reflector plainly visible from at least 200 feet from the rear of the bicycle.~~

~~(d) Use bikes on trails or other areas not specifically designated for such use.~~ (Ordinance 96-659A, Sec. 1.)

10.~~01.190~~03.090 ~~-~~Horseback Riding Restrictions

~~No~~It is unlawful for any person ~~shall~~, within the boundaries of any ~~park~~Property, to ride a horse (including ponies, mules or donkeys) except on ~~designated bridle~~ trails or areas designated for such purpose. Horses ~~shall~~may be loaded and unloaded at designated areas only, ~~shall~~must be thoroughly well trained ~~broken~~ and properly restrained, ~~shall~~must be ridden with due care, and ~~shall~~may not be allowed to graze or go unattended. Horse ~~waste shall~~droppings must be removed by the ~~owner~~rider immediately and disposed of ~~when such waste occurs~~ in an area designated for horse trailer parking. (Ordinance 96-659A, Sec. 1.)

10.~~01.220~~03.100 ~~-~~Domestic Animals Restricted

~~Except for "dog guides," "dog guide trainees," "hearing aid dogs," "hearing aid dog trainees," "assistance animals," and "assistant animal trainees," all as defined by ORS Chapter 659A.103 et seq., and except as required by any other law, n~~No person ~~shall~~may bring a dog or other domestic animal ~~i~~onto ~~any park~~a Property, including within a motor vehicle and on or off leash, ~~or within a motor vehicle,~~ except as ~~may be specifically allowed by the Director.~~follows:

(a) The animal is a "Service Animal" or "Animal Trainee" (each as defined by the

Americans with Disabilities Act), or the animal is an "Assistance Animal" or "Assistance Animal Trainee" (as defined by ORS Chapter 659A.103 et seq.).

(b) Dogs are permitted on-leash on Regional Trails traversing Metro Property, and on-leash at the Chinook Landing Marine Park, the Farmington Paddle Launch, the M. James Gleason Memorial Boat Ramp, and the Sauvie Island Boat Ramp.

(c) Horses are permitted, subject to Section 10.03.090, above. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.~~01.130~~03.110 ~~-~~Bathing and Swimming Restrictions

~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to:

(a) Swim, bathe or wade in any waters or waterways ~~in or adjacent to Blue Lake Park,~~ except in such waters and at such times and places as are designated, and otherwise in compliance with ~~this chapter~~Title X amd ~~or~~all ~~r~~Rules ~~adopted under this chapter~~.

~~(b) Allow a child under the age of five (5) to swim, bathe or wade in Blue Lake.~~

(~~c~~b) Construct, ~~or~~ install or use rope swings adjacent to waterways in any ~~park area~~Property. (Ordinance 96-659A, Sec. 1.)

10.~~01.380~~03.120~~-~~ Boats and Moorages

~~No person shall~~It is unlawful for any person to:

(a) Disobey any applicable signage posted in boat launching, moorage and beach areas.

(b) Moor a boat or other floating vessel longer than 30 minutes on boarding docks, or 12 hours on transient docks.

(c) Improperly secure a boat or other floating vessel in such a manner as to cause personal injury or damage to park property or resources.

(d) Swim, fish, sunbathe, kiteboard, paddleboard, sailboard, wakeboard or water ski in the immediate ~~area~~vicinity of a boat launch or from boat moorage docks.

(Ordinance 96-659A, Sec. 1.)

10.~~01.140~~03.130 Blue Lake Boating Restrictions

It is unlawful to bring into or launch any watercraft of any type from Blue Lake Park, ~~E~~except as provided in subsections (a) through (~~d~~c), below. ~~no person shall bring into or launch any watercraft of any type from Blue Lake Park.~~ All ~~B~~boating activities ~~shall~~must be in accordance with applicable rules of the State of Oregon.

(a) Watercraft belonging to residents whose property adjoins Blue Lake. Such watercraft ~~shall~~must be identified by the current decal and number of the Interlachen Homeowners Association, or its successor organization.

(b) Watercraft for rent at ~~the~~Blue Lake Park.

(c) Privately-owned watercraft between October 1st and April 30th of each year provided that they ~~shall~~do not exceed 14 feet in length ~~(~~or 17 feet for canoes~~)~~, and

3.0 horsepower in motor capability ~~for the purpose of angling in accordance with rules promulgated by the Oregon Department of Fish and Wildlife~~.

~~(d) As allowed by the Director for special events or other special purposes.~~ (Ordinance 96-659A, Sec. 1.)

10.~~01.210~~03.140 ~~-~~Fireworks and Explosives Prohibited

~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to bring, or have in possession, or ignite~~set off~~ or otherwise cause to explode or discharge or burn, any firecrackers, torpedoes, rockets or other fireworks or explosives or inflammable material, or discharge them or throw them into any ~~park~~Property from any adjacent land or highway. This prohibition includes any substance, compound, or mixture ~~or article that in conjunction~~ having properties of such a character that alone or in combination with ~~any~~ other substances, ~~or~~ compounds or mixtures, propels projectiles, explodes or decomposes to produce flames, combustion, noise, or noxious or dangerous odors ~~would be dangerous from any of the foregoing standpoints. The Director, however, may issue a special fireworks permit in accordance with state law.~~Nothing in this section shall be construed to prohibit firearms or the proper use of charcoal lighter fluid in proper containers in picnic grills where permissible. (Ordinance 96-659A, Sec. 1.)

10.~~01.240~~03.150 ~~-~~ Fires ~~Limited~~Restricted

~~No person shall, w~~Within the boundaries of any ~~Park~~Property, it is unlawful to:

(a) Build or attempt to build a fire except in such areas and under such ~~r~~Rules as may be ~~designated~~adopted by the Director. All fires ~~shall~~must be completely extinguished after use.

(b) Drop, throw or otherwise scatter lighted matches, cigarettes or cigars, tobacco paper or other inflammable material within any ~~park~~Property or on any highway, road or street abutting and contiguous to any ~~park~~Property. (Ordinance 96-659A, Sec. 1.)

10.03.160 Firearms Restrictions

Federal, State, County and local ordinances restricting or prohibiting the possession of firearms apply on Metro Property.

10.03.170 Dangerous Weapon Prohibitions

It is unlawful for any person to possess in any Property any object specifically designed for and presently capable of causing, or carried with the intent to threaten or cause, bodily harm to another. Things prohibited under this Section do not include firearms (which are governed by Metro Code Section 10.03.160, above), but include and are not limited to: pellet guns, paintball guns, bow and arrow, spring-loaded weapons, stun guns or tasers, knives having a blade that projects or swings into position by force of a spring or by centrifugal force, any knife with a blade longer than 3-½ inches, any dirk, dagger, ice-pick, sling shot, metal knuckles, martial arts weapons, studded handcoverings, swords, straight razors, tear gas containers, hatchets, axes, or the items described in Section 10.03.180(a), below.

10.01.18003.180 Prohibited Games

No person shall, wWithin the boundaries of any parkProperty, it is unlawful to:

(a) tTake a part in or abet the playing of any games involving thrown or otherwise propelled objects such as stones, arrows, sharp objects, darts, vehicles,paintball, or javelins, or power-projected model airplanes or boats except as may be permitted in designated areasin areas set apart for those forms of recreation.

(b) Participate in or use emerging technologies that can harm vegetation or improvements, or involve off-trail activities, such as geocaching, letterboxing and similar activities, or augmented reality applications, except in accordance with applicable Rules.
(Ordinance 96-659A, Sec. 1.)

10.03.190 Scale Model Equipment, Drones Prohibited

As an owner of real property as described in ORS 837.380, Metro prohibits the use of unmanned aircraft systems (e.g. drones) on its Property. Within the boundaries of any Property, it is unlawful to:

(a) Use or operate any power-propelled model rocket, drone aircraft, glider, wheeled or tracked vehicle or boat, except in areas specifically designated by Metro and posted for such use.

(b) Launch drones from Metro Property or land drones on Metro Property.

(c) Fly any drones at a height of less than 400 feet in the airspace above Metro Property land or water. Metro reserves its rights under ORS 837.380 to recover treble damages and attorneys fees for any trespass in violation of this Section, as permitted by law.

10.03.200 Smoking Prohibitions

It is unlawful to smoke on any Property. "Smoking" means inhaling, exhaling, burning or carrying any lighted pipe, cigar, cigarette, weed, plant, or other combustible organic or chemical substance, the smoke from which is intended to be inhaled or drawn into the nose or mouth. In addition "smoking" includes the use of any vapor device, of any product name or descriptor, which releases gases, particles, or vapors into the air as a result of combustion, electrical ignition, or vaporization intended to be drawn into the nose or mouth (excluding any United States Food and Drug Administration approved nebulized medication).

10.01.20003.210 Consumption of Alcoholic Beverages Limited

(a) Except as provided in subsections (b) and (c) of this section, no person shall bring into or consume alcoholic beverages in any park, provided, however, that the Council may, from time to time, designate certain parks or park areas where consumption with meals.

(b) The Director may, by issuance of a permit, allow the sale of alcoholic beverages on the premises of designated facilities when duly licensed by the Oregon Liquor Control Commission.

~~(c) After the proper permit(s) are secured from the Director, alcohol may be consumed in designated areas at Blue Lake Park, Oxbow Park and Howell Territorial Park.~~It is unlawful to bring onto, sell within, or consume alcoholic beverages or controlled substances (as defined by Oregon law) on any Property. ~~–~~(Ordinance 96-659A, Sec. 1.)

10.03.220 Public Intoxication Prohibited

Within the boundaries of any Property it is unlawful to behave in any way that leads Metro enforcement personnel to conclude, in their sole discretion, that such person is intoxicated or under the influence of controlled substances.

10.03.230 Improper Exposure; Sexual Activity

Within the boundaries of any Property it is unlawful for any person to expose his or her genitalia while in a place visible to another person or to engage in sexual conduct as defined in ORS 167.060.

10.~~01.260~~03.240 Violent and Excessively Loud Conduct Prohibited

~~No person shall, w~~Within the boundaries of any ~~park~~Property, it is unlawful to:

(a) ~~e~~Engage in, promote, instigate, encourage, aid or abet fighting or similar violent conduct which would threaten the physical well-being of ~~the public or a park employee, or cause excessive amplified or nonverbal noise~~any person or animal.

(b) Make, continue, cause or permit to be made or continued any noise disturbance, as defined in 10.01.010.

(c) Use or operate any device designed for sound production, amplification or reproduction in such a manner as to cause a noise disturbance. (Ordinance 96-659A, Sec. 1.)

10.~~01.300~~03.250 Signs Restricted

~~No person shall, w~~Within the boundaries of any ~~park~~Property, and except speech protected by the Oregon and the United States Constitution, it is unlawful to:

(a) Solicit for any public or private purpose.

(b) Distribute or otherwise place any non-authorized printed material on any vehicle parked in a Property.

(~~a~~c) Paste, glue, tack or otherwise post any sign, decal, placard, advertisement or inscription whatsoever, or cause to be erected any sign whatsoever, except upon permission of the Director~~, unless the person is a regularly licensed concessionaire acting by and under the written authority of the Director~~ or designee.

~~(b) Distribute or otherwise place any non-authorized printed material on any vehicle parked in a park facility.~~ (Ordinance 96-659A, Sec. 1.)

10.~~01.290~~03.260 Concessions, Vending and Peddling Restricted

(a) Before a person may act as a concessionaire at a Property, the person must secure a Permit in compliance with Metro's standard procedures.

(b) ~~Except as expressly provided in this section, n~~No person ~~shall~~may, within the boundaries of any ~~park~~Property, expose, advertise or offer for sale or rent any article,

service, or thing, or station or place any stand, cart or vehicle for the transportation, sale or display of any article or thing, unless the person is acting ~~by and~~ under the ~~written~~ authority of ~~the Director~~a Permit. (Ordinance 96-659A, Sec. 1.)

10.01.31003.270 ~~Park~~Posted Hours of Operation

Park hours of operation ~~shall~~will be as posted, except for unusual or unforeseen circumstances and emergencies, as determined by the Director. The hours of operation for Parks not posted are legal sunrise to legal sunset. No person may enter or remain in a Park when it is closed. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

~~**10.01.150 Fishing Prohibited in Swimming Areas**~~

~~No person shall fish, within the boundaries of any park, in any designated swimming area.~~

~~(Ordinance 96-659A, Sec. 1.)~~

~~**10.01.160 Hunting Prohibited**~~

~~Hunting is prohibited.~~

~~(Ordinance 96-659A, Sec. 1; Ordinance 10-1230, Sec. 3)~~

10.01.17003.280 ~~-~~ Camping Permits and Restrictions~~Prohibitions~~

~~No person shall, w~~Within the boundaries of any ~~park~~Property:

(a) Camp overnight or longer in any Property without first obtaining a ~~camping p~~Permit, camp in any manner not specifically provided for in such Permit, or camp at any time or in any place not designated for camping..

(~~e~~b) Camp if he/she is under the age of 18, unless he/she is accompanied by an adult.

(~~b~~c) Camp in any Park for longer than five (5) consecutive days, ~~in any specific park.~~

~~(c) Camp~~ or for ~~more~~longer than ten (10) days in any 30-day period ~~in any specific park~~.

~~(d) Camp at any time or in any place except as specifically provided for in a camping permit.~~

~~(e) Camp if he/she is under the age of 18, unless he/she is accompanied by an adult.~~

~~(f) Camp in nondesignated areas.~~

~~(g) Allow more than eight (8) people to occupy a site.~~

~~(h) Ignore the 10:00 p.m. to 6:00 a.m. quiet time period.~~

~~(i) Check out after 2:00 p.m. without paying the fee for an additional day.~~ (Ordinance 96-659A, Sec. 1.)

10.01.33003.290 ~~-~~ Closed Areas

All or any section or part of any ~~park~~Property may be declared, posted, signed or otherwise designated closed to the public by the Director at any time and for any interval of time, either temporarily, indefinitely, or at regular and stated intervals, daily or otherwise, and either entirely or merely to certain uses, as the Director ~~shall~~may find reasonably

necessary. No person may enter any Property posted as "Closed to Public" or "No Public Access." (Ordinance 96-659A, Sec. 1.)

~~**10.01.180 Prohibited Games**~~

~~No person shall, within the boundaries of any park, take a part in or abet the playing of any games involving thrown or otherwise propelled objects such as stones, arrows, sharp objects, vehicles, javelins or power-projected model airplanes or boats except in areas set apart for those forms of recreation. (Ordinance 96-659A, Sec. 1.)~~

~~**10.01.190 Horseback Riding Restrictions**~~

~~No person shall, within the boundaries of any park, ride a horse except on designated bridle trails. Horses shall be unloaded at designated areas only, shall be thoroughly broken and properly restrained, shall be ridden with due care, and shall not be allowed to graze or go unattended. Horse waste shall be removed by the owner when such waste occurs in an area designated for horse trailer parking.(Ordinance 96-659A, Sec. 1.)~~

~~**10.01.200 Consumption of Alcoholic Beverages Limited**~~

~~(a) Except as provided in subsections (b) and (c) of this section, no person shall bring into or consume alcoholic beverages in any park, provided, however, that the Council may, from time to time, designate certain parks or park areas where consumption with meals.~~

~~(b) The Director may, by issuance of a permit, allow the sale of alcoholic beverages on the premises of designated facilities when duly licensed by the Oregon Liquor Control Commission.~~

~~(c) After the proper permit(s) are secured from the Director, alcohol may be consumed in designated areas at Blue Lake Park, Oxbow Park and Howell Territorial Park. (Ordinance 96-659A, Sec. 1.)~~

~~**10.01.210 Fireworks and Explosives Prohibited**~~

~~No person shall, within the boundaries of any park, bring, or have in possession, or set off or otherwise cause to explode or discharge or burn, any firecrackers, torpedoes, rockets or other fireworks or explosives or inflammable material, or discharge them or throw them into any park from any adjacent land or highway. This prohibition includes any substance, compound, mixture or article that in conjunction with any other substance or compound would be dangerous from any of the foregoing standpoints. The Director, however, may issue a special fireworks permit in accordance with state law. (Ordinance 96-659A, Sec. 1.)~~

~~**10.01.220 Domestic Animals Restricted**~~

~~Except for "dog guides," "dog guide trainees," "hearing aid dogs," "hearing aid dog trainees," "assistance animals," and "assistant animal trainees," all as defined by ORS Chapter 659A.103 et seq., and except as required by any other law, no person shall bring a dog or other domestic animal into any park, on or off leash or within a motor vehicle, except as may be specifically allowed by the Director. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)~~

10.01.230 Soliciting Prohibited
No person shall, within the boundaries of any park, solicit for any public or private purpose. (Ordinance 96-659A, Sec. 1.)

10.01.240 Fires Limited
No person shall, within the boundaries of any Park:

(a) Build or attempt to build a fire except in such areas and under such rules as may be designated by the Director. All fires shall be completely extinguished after use.

(b) Drop, throw or otherwise scatter lighted matches, cigarettes or cigars, tobacco paper or other inflammable material within any park or on any highway, road or street abutting and contiguous to any park. (Ordinance 96-659A, Sec. 1.)

10.01.250 Game of Chance Prohibited
No person shall, within the boundaries of any park, gamble or participate in or abet any game of chance except as approved by the Director in writing and in compliance with the statutes of the State of Oregon. (Ordinance 96-659A, Sec. 1.)

10.01.260 Violent and Excessively Loud Conduct Prohibited
No person shall, within the boundaries of any park, engage in, promote, instigate, encourage, aid or abet fighting or similar violent conduct which would threaten the physical well-being of the public or a park employee, or cause excessive amplified or nonverbal noise. (Ordinance 96-659A, Sec. 1.)

10.01.270 Exhibiting Permits Required
No person shall:

(a) Fail to produce and exhibit any permit from the Director the person claims to have, upon request of any authorized enforcement personnel or park employee who shall desire to inspect the permit for purpose of enforcing compliance with any ordinance or rule.

(b) Fail to clearly display at all times, while within the boundaries of any park, any required proof of entrance and /or parking fee payment on the dashboard of the person's vehicle so that such proof is plainly visible from the exterior of the vehicle. (Ordinance 96-659A, Sec. 1.)

10.01.280 Interference with Permittees Prohibited
No person shall disturb or interfere unreasonably with any person or party occupying any park area or participating in any activity in a park under the authority of a permit. (Ordinance 96-659A, Sec. 1.)

10.01.290 Vending and Peddling Restricted
Except as expressly provided in this section, no person shall, within the boundaries of any park, expose, advertise or offer for sale or rent any article or thing, or station or place any stand, cart or vehicle for the transportation, sale or display of any article or thing, unless the person is acting by and under the written authority of the Director. (Ordinance 96-659A,

Sec. 1.)

10.01.300 Signs Restricted

No person shall, within the boundaries of any park:

(a) Paste, glue, tack or otherwise post any sign, placard, advertisement or inscription whatsoever, or cause to be erected any sign whatsoever, except upon permission of the Director, unless the person is a regularly licensed concessionaire acting by and under the written authority of the Director.

(b) Distribute or otherwise place any non-authorized printed material on any vehicle parked in a park facility. (Ordinance 96-659A, Sec. 1.)

10.01.310 Park Hours

Park hours of operation shall be as posted, except for unusual or unforeseen circumstances and emergencies. The hours of operation for Parks not posted are legal sunrise to legal sunset. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.01.320 Posting of Park Rules

The Rules and provisions for use and administration of parks, notice of those rules or summaries of those Rules shall be kept posted within the main entrance of each park or at suitable other locations. (Ordinance 96-659A, Sec. 1.)

10.01.330 Closed Areas

All or any section or part of any park may be declared closed to the public by the Director at any time and for any interval of time, either temporarily or at regular and stated intervals, daily or otherwise, and either entirely or merely to certain uses, as the Director shall find reasonably necessary. (Ordinance 96-659A, Sec. 1.)

10.01.340 Lost and Found Articles

The finding of lost articles by park employees shall be reported to the Director or his/her designee, who shall make every reasonable effort to find and return lost articles and dispose of unclaimed articles as prescribed by law. (Ordinance 96-659A, Sec. 1.)

10.01.350 Permits for Camping, Group Picnics and Vending

A permit shall be obtained as indicated before participating in the following park activities:

(a) In those parks where overnight camping is allowed, a permit shall be obtained from the park attendant at the park.

(b) A permit must be secured from the Parks and Nature main office for any organized event consisting of more than 25 persons.

(c) Before a person may act as a concessionaire at a park, the person shall secure an executed contract in compliance with Metro's standard contracting procedures.

(d) A permit for concessions at special events which are intended to raise funds for Metro parks purposes may be issued by the Director. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

10.01.360 Special Use Permit

A special use permit shall be obtained prior to pursuing the following activities in any park:

(a) Movie, commercial or television filming, photography and production.

(b) Fishing, water skiing, track or any other organized sporting event.

(c) Special educational events or festivals, except those specifically hosted by Metro.

(d) Amplified sound, pony rides, dunk tanks, use of alcohol with a reservation permit or any other type of special use.

(e) Any other organized event or activity involving 25 persons or more except for picnics where a reservation has been secured. (Ordinance 96-659A, Sec. 1.)

10.01.370 Permit Revocation

The Director or his/her designee shall have the authority to revoke a permit upon a finding of violation of any rule, ordinance, statute, or any special use or reservation permit provision. (Ordinance 96-659A, Sec. 1.)

10.01.380 Boats and Moorages

No person shall:

(a) Disobey any applicable signage posted in boat launching, moorage and beach areas.

(b) Moor a boat longer than 30 minutes on boarding docks or 12 hours on transient docks.

(c) Improperly secure a boat in such a manner as to cause personal injury or damage to park property or resources.

(d) Swim, fish or water ski in the immediate area of or from boat moorage docks.

(Ordinance 96-659A, Sec. 1.)

10.01.390 Enforcement Personnel

(a) The Director and the Director's authorized representatives shall, in connection with their duties imposed by law, diligently enforce the provisions of this chapter.

(b) No person shall harass, obstruct, interfere with or disobey the direction of any authorized enforcement personnel or park employee carrying out the enforcement of this chapter or rules adopted under this chapter. (Ordinance 96-659A, Sec. 1.)

10.01.400 Citation, Ejectment and Exclusion, Hearing

The Director and authorized enforcement personnel shall:

(a) Have the authority to arrest, cite in lieu of arrest, cite for civil penalties or eject from the park any person acting in violation of this chapter or the laws of the State of Oregon.

(b) Exclude from the park any person acting in violation of this chapter or the laws of the State of Oregon.

(c) Exclusions exceeding one (1) year shall be approved by the Director. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)

~~**10.01.410 Seizure of Property**~~

~~The Director and any authorized enforcement personnel shall have the authority to seize and confiscate any property, thing or device, including but not limited to motor vehicles and chain saws, used in violation of this chapter. (Ordinance 96-659A, Sec. 1.)~~

~~**10.01.420 Hearing Regarding Seized Property**~~

~~(a) Persons who have had any personal property, thing or device confiscated under Section 10.01.410 may request a hearing to appeal the confiscation by sending a written request for hearing to the Director by registered or certified mail.~~

~~(b) The hearing shall be conducted in accord with the applicable contested case procedures set forth in the Metro Code.~~

~~(c) Any property, thing or device which was not wrongfully confiscated shall become the property of Metro and shall be disposed of in a manner to be determined by the Director. (Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)~~

~~**10.01.430 Other Laws Applicable**~~

~~This chapter shall in no way be a substitute for or eliminate the necessity of conforming with any and all state laws and rules and other ordinances which are now or may be in the future in effect which relate to the activities regulated in this chapter, including but not limited to City or County ordinances containing regulations and prohibitions pertaining to firearms and dangerous or deadly weapons. (Ordinance 96-659A, Sec. 1.; Ordinance 10-1230, Sec. 4)~~

~~**10.01.440 Severability**~~

~~If any section, subsection, sentence, clause, phrase or portion of this chapter is for any reason held invalid or unconstitutional by a court of competent jurisdiction, that portion shall be considered a separate, distinct and independent provision, and the holding shall not affect the validity of the remaining portion of this chapter. (Ordinance 96-659A, Sec. 1.)~~

EXHIBIT B TO ORDINANCE NO. 18-1419

CHAPTER ~~10.02~~10.04

~~PARK~~ FEES

~~Section Title~~

Repealed

10.02.050 Fees for Memorials and Cemeteries
(Repealed Ordinance 04-1038A, Sec. 2.)

10.02.100 Penalties
(Repealed Ordinance 15-1366.)

10.02.110 Bail and Fine Collection
(Repealed Ordinance 15-1366.)

~~10.02.010~~10.04.010 Purpose and Authority

It is the purpose of this chapter to establish ~~park~~ fees for certain uses at Metro Property pursuant to Metro Code Section ~~10.01.010~~10.02.030. The Chief Operating Officer, or his or her designee, may set additional fees, or adjust any fees established herein. If the Chief Operating Officer elects to set additional fees or adjust any fees established pursuant to this Chapter 10.04, the Chief Operating Officer will provide the Metro Council with 45 business days notice prior to the effective date of the fee or fee adjustment. Upon notice of the additional fee or fee adjustment, the Metro Council may elect to affirm or modify the additional fee or fee adjustment by resolution of the Metro Council. The fee or adjusted fee may thereafter be adjusted as set forth in this Metro Code Section 10.04.010.

(Ordinance 96-659A, Sec. 1.)

~~10.02.020~~10.04.020 ~~Park~~ Fees

~~Except as otherwise set forth herein, Park Fees shall be set and adjusted by the Metro Council.~~

~~The following fees shall be~~Metro will charge~~d~~ and collect~~ed by Metro for and prior to~~ the following ~~park~~ use~~s~~ and activity~~ies~~ fees:

(a) Parking fees at Blue Lake Park, Chinook Landing Marine Park, M. James Gleason Memorial Boat Ramp, and Oxbow Park, and ~~shall be $5.00 per motorized vehicle on all days and $7.00 per bus on all days.~~

~~(b) Boat launching and/or parking fees at the M. James Gleason Boat Ramp shall be $5.00 and fees at the Chinook Landing Marine Park shall be $5.00 per motorized vehicle on all days.~~

~~(c) The~~ fees for annual parking passes at these locations. ~~in lieu of daily parking fees, launching and/or parking fees at Blue Lake Park, Oxbow Park, Chinook Landing, and M. James Gleason Boat Ramp shall be as follows:~~

~~(1) Regular: $40.00 per year (January 1 through December 31)~~

~~(2) Seniors: $30.00 per year (January 1 through December 31)~~

~~(3) Low-Income/Disabled: $10.00 per year (January 1 through December 31)~~

(b)~~(d)~~ Reservation fees for shelters and reservable picnic areas at Blue Lake, ~~and~~ Oxbow Park~~s~~, Scouters Mountain, Graham Oaks, and Howell Territorial Parks ~~shall be set and adjusted by the Chief Operating Officer~~.

(c)~~(e)~~ Fees for ~~alcohol permits at Blue Lake and Oxbow Parks shall be set and adjusted by the Chief Operating Officer.~~

~~(f) O~~overnight camping ~~fees at Oxbow Park~~, including fees for nightly use of overnight group camps ~~at Oxbow Park by nonprofit and youth organizations and fees for additional vehicles, shall be set and adjusted by the Chief Operating Officer~~. ~~Permit must be displayed. Each vehicle must pay parking fee on initial day of entry.~~

~~(g) Fees for special events shall be set and adjusted by the Chief Operating Officer.~~

(d)~~(h)~~ ~~Except for use by Metro, the r~~Rental ~~rates~~fees, and security deposits for the ~~for "The~~ Lake House~~"~~ at Blue Lake Park ~~shall be set and adjusted by the Chief Operating Officer~~.

(e) Permits for which the Chief Operating Officer, or his or her designee, has determined a fee is required.

10.04.030 Fee Waivers or Suspensions

(a)~~(i)~~ No ~~P~~parking fees ~~at Blue Lake Park and Oxbow Park shall~~will be ~~waived~~ charged for any on-duty police officer ~~(officers' fees are waived also at Chinook Landing Marine Park and the Gleason Boat Ramp)~~ or off-duty Metro ~~e~~Employee who presents valid current identification at the ~~park~~Propety entrance. ~~Fee waivers shall not apply to any special events or other facilities.~~

(b)~~(j)~~ Parking fees ~~at Blue Lake Park, Oxbow Park, Chinook Landing, and M. James Gleason Boat Ramp,~~ and camping fees ~~at Oxbow Park, shall~~will be waived for any disabled veteran who presents valid current photo identification and an Oregon State Parks Special Access Pass for Veterans with Service Connected Disabilities ID Card, and places a green placard issued by Oregon State Parks in said veteran's vehicle in full view on the dashboard or hanging from the rear-view mirror. Free camping under this Section requires a reservation and is otherwise limited by Section 10.03.280.

~~Fee waivers shall not apply to fees for the use of other facilities.~~

~~(Ordinance 96-659A, Sec. 1.; Ordinance 98-722, Sec. 1; Ordinance 01-894, Sec. 1; Ordinance 02-978, Sec. 1; Ordinance 03-1008; Ordinance 04-1047, Sec. 1; Ordinance 06-1109; Ordinance 07-1166; Ordinance 09-1211A; Ordinance 15-1366.)~~

~~10.02.030 Suspension of Fees~~

(c) Collection of any fee under ~~Section 10.02.020~~this Chapter may be waived or suspended by order of the Director ~~of Parks and Nature or his/her designee~~ for such period of time as the order may provide. The Director ~~shall~~will develop and implement a written policy to guide decisions related to the waiver or suspension of fees.

(Ordinance 96-659A, Sec. 1.; Ordinance 98-722, Sec. 1; Ordinance 01-894, Sec. 1; Ordinance 02-978, Sec. 1; Ordinance 03-1008; Ordinance 04-1047, Sec. 1; Ordinance 06-1109; Ordinance 07-1166; Ordinance 09-1211A; Ordinance 15-1366.)

~~(Ordinance 96-659A, Sec. 1.; Ordinance 15-1366.)~~

~~10.02.040~~10.04.040 ~~Park~~ Use Without Required Fee Prohibited

~~No person shall~~It is unlawful to engage in a ~~park~~use or activity on any Property for which there is a required fee without first paying the ~~required~~ fee. Any person engaged in a ~~park~~use or activity on a Property for which there is a fee ~~shall~~will be required to produce and exhibit the receipt ~~from the Director showing fee payment, which the person claims to have,~~or other satisfactory proof of payment upon request of any Employee or authorized ~~person who shall desire to inspect the receipt~~enforcement personnel for the purpose of enforcing compliance with this ~~c~~Chapter or any ~~r~~Rules ~~promulgated pursuant thereto~~.

(Ordinance No. 96-659A, Sec. 1.)

EXHIBIT C TO ORDINANCE NO. 18-1419

CHAPTER 10.~~04~~05

~~PIONEER CEMETERY PROPERTIES~~

HISTORIC CEMETERIES

~~SECTIONS TITLE~~

~~* Formerly "Pioneer Cemeteries" 10.04.010 to 10.04.060, Ordinance No. 04-1038A, Sec. 1., effective 6/24/04; repealed and replaced by Ordinance No. 12-1286.~~

~~** Metro Code Chapter 10.04, "Pioneer Cemetery Properties," Ordinance No. 12-1286, Sec. 1, adopted October 4, 2012, effective January 2, 2013.~~

10.~~04~~05.010 Purpose

The purpose of this chapter is to provide regulations controlling the operation of Metro owned and operated ~~Pioneer~~Historic Cemeteries and governing the use of these Cemeteries by members of the public in order to protect and preserve the ~~Pioneer~~Historic Cemeteries, the Graves and the Remains of those interred therein.

10.~~04~~05.020 ~~–~~Policy

The Metro Council has determined that it is necessary to adopt ~~these code provisions~~this Chapter in order to ensure the long-term stability of Metro's cemetery operations, which ~~shall~~will be achieved by Cemeteries being operated as follows:~~–~~

(a) In compliance with applicable state laws;

(b) As community assets;

(c) In a manner that will maximize public financial benefit and long-term stability; and

(d) To protect and preserve their historically significant nature.

All four above objectives are to be considered equally important in the management of Metro's ~~Pioneer~~Historic Cemeteries.

10.~~04~~05.030 ~~–~~Definitions

For the purposes of this ~~chapter~~Chapter, unless the context requires otherwise, the following terms ~~shall~~ have the meanings ~~indicated:~~given to them below:

~~(a) "Advance Sale"~~**Preneed** means the sale and purchase of an Interment Right to a predetermined Grave in advance of use for any person to whom the owner designates for Burial in the predetermined Grave.

~~(b) "~~**At-Need**~~"~~ means at the time of death sale of Graves/plots, services, memorials and materials which are to be delivered immediately or upon delivery to the Cemetery for immediate Interment. ~~Graves/plots are At-Need items due to their purchase being an immediate addition of an asset to one's estate.~~

~~(c) "~~**Burial**~~"~~ means the placement of Human Remains in a Grave, in accord with state law and regulations.

~~(d) "~~**Burial Services**~~"~~ means the opening and closing of the Grave in accord with state law and regulations, including excavation and fill, the provision and placement of a concrete liner or vault and any overtime charges that apply.

~~(e) "Cemetery," "Pioneer Cemeteries," and "Cemeteries" means those certain parcel(s) of real property set forth in section 10.04.030, designated, owned and operated by Metro for the disposition of Human Remains by any one or the combination of more than one of the following:~~

- ~~A Burial place for ground or earth Interments, either casket or cremation.~~
- ~~A mausoleum or crypt Interments.~~
- ~~A columbarium or Interment of Cremated Remains.~~

~~(f) "~~**Certificate of Interment~~/Inurnment~~ Rights**~~"~~ or ~~"~~**Certificate**~~"~~ is a perpetual right to use property for burial purposes.~~-~~ The fee title of the property is without possession of any estate or interest in the land and all rights of ownership therein remain with Metro.

~~(g) "~~**Cremated Remains**~~"~~ means the remains of a cremated human body after the completion of the cremation process.

~~(h) "~~**Contract of Purchase**~~"~~ or ~~"~~**Contract**~~"~~ is an agreement between Metro and the purchaser of Burial Services or an Interment~~/Inurnment~~ Right to a Grave space ~~or~~, Niche, or Ossuary.

~~(i) "~~**Disinterment**~~"~~ is the removal of Human Remains from a Grave space as defined in ORS 97.220.

~~(j) "~~**Family Plot**~~"~~ means a group of contiguous Graves sold for the purpose of the Interment or Inurnment of related individuals as set forth and governed by ORS 97.560-650.

~~(k) "~~**Grave**~~"~~ means a space of ground in a Cemetery used or intended to be used for Interment or Inurnment.

~~(l) "~~**Human Remains**~~"~~ or ~~"~~**Remains**~~"~~ are the body of a deceased person in any stage of decomposition.

~~(m) "~~**Interment**~~"~~ is the disposition of Human Remains by entombment or Burial in a place used or intended to be used and dedicated for Cemetery purposes.

~~(n) "~~**Inurnment**~~"~~ is the placement of cremated Human Remains by entombment or Burial in a place used or intended to be used and dedicated for Cemetery purposes.

~~(o) "~~**Marker**~~"~~ means a flat Grave tablet or headstone placed flush to the ground, identifying a Grave or Graves.

~~(p) "~~**Memorial**~~"~~ means a nameplate or inscription identifying a crypt or Niche, or any other improvement or permanent structure intended to identify the location of a Grave or Graves, other than a Marker or a Monument.

~~(q) "~~**Monument**~~"~~ means an upright or vertical headstone or tombstone identifying a Grave or Graves.

~~(r) "~~**Niche**~~"~~ means a space in a structure to place cremated Human Remains of one or more persons.

~~(s) "~~**Ossuary** means is a communal below-ground depository for cremated Remains.

Outer Burial Container~~"~~ is a concrete or composite material container which is buried in the ground to provide outer protection and into which Human Remains or Cremated Remains are placed for Burial purposes.

~~(t) "~~**Perpetual Care Fund**~~"~~ is a special account set aside for holding of funds used for the required perpetual maintenance of the Cemetery grounds.

10.~~04~~05.040 –Description of ~~Pioneer~~Historic Cemeteries

The areas dedicated for Interment purposes by Metro ~~shall~~ consist of the following ~~Cemeteries~~properties:

(a) Brainard Cemetery located at NE 90th Ave. and NE Glisan St., Portland

(b) Columbia Pioneer Cemetery located at NE Sandy Blvd. and NE 99th Ave., Portland

(c) Douglass Pioneer Cemetery located at Hensley Road and SE 262nd Avenue, Troutdale

(d) Escobar Cemetery located at SW Walters Road and Littlepage Road, Gresham

(e) Gresham Pioneer Cemetery located at SW Walters Road, Gresham

(f) Grand Army of the Republic Cemetery located at SW Boones Ferry Road and Palatine Road, Portland

(g) Jones Cemetery located at SW Hewitt Blvd. and SW Humphrey Blvd., Portland

(h) Lone Fir Cemetery located at SE 26st Ave. and SE Stark St., Portland

(i) Mt. View-Corbett Cemetery located at Smith Road and Evans Road, Corbett

(j) Mt. View-Stark Cemetery located at SE Stark Street and SE 257th Street, Gresham

(k) Multnomah Park Cemetery located at SE 82nd Ave. and SE Holgate Blvd., Portland

(l) Pleasant Home Cemetery located at Bluff Road and Pleasant Home Road, Gresham

(m) Powell Grove Cemetery located at NE Sandy Blvd. and NE 122nd Ave., Portland

(n) White Birch Cemetery located at SW Walters Road, Gresham

10.~~04~~05.050 –Operation and Administration

Metro ~~Cemeteries shall be operated~~will operate and ~~maintained~~maintain its Cemeteries in accordance with ~~Metro Code~~ Title ~~10.01~~X and ~~this chapter.~~all other applicable laws.

~~**10.04.055 Enforcement Authority**~~

~~(a) The Chief Operating Officer or designee shall have the authority to enforce all of the provisions of this chapter, including but not limited to the authority to enforce any rules and regulations established pursuant to this chapter.~~

~~(b) The Chief Operating Officer or designee shall have the authority to establish rules and regulations governing the Pioneer Cemeteries consistent with the provisions of this chapter, including but not limited to rules governing Interment, Inurnment, and fees. Said rules shall be in writing, shall be posted on Metro's website and shall be filed with the Metro Council.~~

~~(c) No person shall violate any rule or regulation which has been established by the Chief Operating Officer pursuant to this chapter. Said violation shall be subject to enforcement and penalties as set forth in Chapters 10.01.400 and 10.01.600.~~

~~(d) The acts of Metro elected officials, employees, volunteers, interns, contractors and other agents constituting official duties, and other acts officially authorized by Metro by agreement, special use permit, or otherwise in writing shall not be deemed to violate this chapter or rules established pursuant hereto.~~

10.~~04~~05.060 ~~–~~Cemetery Hours of Operation

(a) Metro's Cemeteries are open to the public from 7:00am to legal sunset. Hours of operation will be posted at each Cemetery.

(b) Entering or remaining in a Cemetery outside of normal operating hours without obtaining prior authorization from Metro is a violation subject to Ejectment and Exclusion from the Cemetery as set forth in ~~Chapter 10.01.400 and/or the Penalties set forth in Chapter 10.01.600~~Metro Code Section 10.02.110.

(c) Interments and Inurnments ~~shall~~may take place between the hours of 8:00 am and 3:30 pm daily, with the exception of Saturdays, Sundays and legal holidays. Interments and Inurnments may be made outside of these hours at the discretion of the ~~Chief Operating Officer~~Director, for an additional fee.

10.~~04.065~~ 05.070 Other Uses

Uses other than Interment~~/Inurnment~~, Grave visitation, passive recreation, and historical research are prohibited unless specifically provided by Special Use Permit issued pursuant to ~~Metro~~ Chapter 10.~~01.360~~02.

10.~~04.070~~ 05.080 Sale of Interment~~/Inurnment~~ Rights and Burial Services

(a) Interment~~/Inurnment~~ Rights to a Grave may be sold by Metro both in advance (~~Advance Sale~~Preneed) or At-Need, by Contract of Purchase. ~~-~~Purchasers ~~shall~~must pay the full fee for Interment~~/Inurnment~~ Rights on the date of sale. ~~-~~Upon payment, Metro ~~shall~~will issue the purchaser a Certificate of Interment~~/Inurnment~~ Rights.

(b) Burial Services and goods ~~shall~~may be sold At-Need through a Contract of Purchase.

(c) Fees and charges for Burial Services and goods must be fully paid before Interment/Inurnment will be permitted. Exceptions may be made at the discretion of the Director.

(d) Metro ~~shall~~will retain ownership and control of all Graves or Niches sold, subject to the terms of the Certificate of Interment~~/Inurnment~~ Rights.

10.~~04.080~~ 05.090 Multi-Interment/Inurnment Right Sales Restricted

(a) Except as set forth in this ~~chapter 10.04.080(b and c),~~Section, below, the sale by Metro of a group of Interment~~/Inurnment~~ Right Certificates is prohibited.

(b) A group of contiguous Interment~~/Inurnment~~ Right Certificates for contiguous Graves may be sold to one family or individual for the purposes of creating a Family Plot.

(c) A group of Interment~~/Inurnment~~ Right Certificates other than a Family Plot may be sold upon the adoption of a resolution by the Metro Council approving an agreement establishing terms, including the rates and terms of resale. ~~-~~A one-time administrative fee set at the discretion of the Chief Operating Officer or designee ~~shall~~must be charged in addition to regular fees and rates.

10.~~04.090~~ 05.100 Transfer of Certificate of Interment ~~and Inurnment~~ Rights

(a) Interment/Inurnment Rights, whether conveyed by the ~~Pioneer~~Historic Cemeteries to the recipient by Deed, Certificate or other means, cannot be sold, transferred, bartered, exchanged or assigned (hereafter "Transfer(red)") to any other person or entity without the prior written consent of the Chief Operating Officer or designee, in accordance with Oregon Revised Statutes Chapter 97 and as set forth in ~~s~~Section 10.04.070.

(b) ~~In the event~~If an owner of an Interment~~/Inurnment~~ Right seeks permission from Metro to Transfer an Interment~~/Inurnment~~ Right, Metro ~~shall~~will have the first right to buy back said Interment~~/Inurnment~~ Right from the owner for the price paid when the Interment~~/Inurnment~~ Right was originally sold.

(c) No attempted Transfer of an Interment~~/Inurnment~~ Right ~~shall~~will be complete or effective unless it has been approved by Metro and recorded in the Metro Cemetery records.

(d) A one-time administrative fee set at the discretion of the Chief Operating Officer or designee ~~shall~~must be charged for all Transfers.

(e) The above set forth notwithstanding, the Transfer Interment/Inurnment Rights within Family Plots to family members in accord with Oregon Revised Statute Chapter 97 is permitted without fee or other charge.

(f) Except as set forth in written agreements entered into by Metro prior to the first effective date of this ~~ordinance,~~Section 10.05.100 (January 2, 2013), the sale of Interment~~/Inurnment~~ Rights by purchasers to third parties for more than the ~~current~~ rate charged by Metro on the date of such sale is prohibited.

10.~~04.100~~ 05.110 Full Body Grave Dimensions – Burial Limits

A single Grave ~~shall~~must measure 40 inches by 9 feet and may contain up to ~~one (1) casket~~two (2) caskets and six (6) urns, unless otherwise authorized at the sole discretion of the ~~Chief Operating Officer~~Director or ~~designee and/or the rules adopted pursuant to this chapter~~by Rule.

10.~~04.110~~ 05.120 Outer Burial Containers Required

Metro approved Outer Burial Containers are required for all Interments/Inurnments in Metro Cemeteries with the exception of any niche.

10.~~04.120~~ 05.130 Disinterment

(a) Unless ordered by the State Medical Examiner or a court having jurisdiction over Metro Cemeteries, Remains interred in a Grave at any Metro Cemetery ~~shall only~~may be disinterred only upon the written consent of the Chief Operating Officer or designee and the person having the right to control the disposition of said Remains, and in accordance with applicable state law.

(b) If Disinterment is needed by Metro and consent of the person having the right to control the disposition of said Remains cannot be obtained or such person cannot be located, the Chief Operating Officer or designee may apply to the Multnomah County Circuit Court for permission to disinter. ~~-~~Said application ~~shall~~must be submitted only after notice of application to the Metro Council.

10.~~04.130~~ 05.140 Flowers Funerary Decorations Restricted

(a) All flowers, funerary decorations and plants on Graves in violation of this section, and/or that conflict with normal grounds maintenance, will be forfeited, removed and disposed without notice.

(~~a~~b) All flowers, funerary easels and decorations placed on a Grave at the time of a funeral and not removed within three (3) weeks after the Interment are subject to removal and disposal by Metro.

(~~b~~c) All flags, flowers and plants placed on Graves on Memorial Day and not removed within three (3) weeks after ~~the Interment~~Memorial Day are subject to removal and disposal by Metro.

(~~c~~d) Artificial flowers and plants are prohibited between March 1st and November 15th of each year, except for a period of three weeks after Memorial Day observance.

(~~d~~e) All flowers, funerary easels and decorations will be subject to removal and disposal by Metro when they become withered, faded or otherwise unsightly, in Metro's sole discretion.

10.~~04.135~~ 05.150 Personal Effects and Mementos Prohibited

~~(a)~~ Personal property, including but not limited to, sacred objects, photographs, toys, clothing, glassware, banners, pin-wheels, chimes, balloons or staked items, left in the Cemetery or placed on or near a Grave is prohibited, except as otherwise permitted in writing by Metro at the discretion of the ~~Chief Operating Officer or designee.~~Director. Said personal property will be forfeited, removed by ~~the Cemeteries staff~~Metro and disposed without notice or other process.

10.~~04.140~~ 05.160 Planting On or Around Graves Prohibited

Planting of trees, shrubs or any other plant material, except turf grass, on Graves or their borders is prohibited, unless approved in writing by the Director.

10.~~04.145~~ 05.170 Grave Improvements Prohibited

Grave improvements other than Metro approved Markers, Monuments and Memorials are prohibited. ~~-~~The placement or installation by any person of temporary or permanent improvements covering, bordering or indicating the boundaries of Graves, including but not limited to posts and fences of any kind, walls, coping or curbs of concrete brick, stone or marble, is ~~a violation of this chapter subject to the penalties set forth in Chapter~~

~~10.01.600.~~prohibited. Memorials and improvements so placed or installed ~~shall~~will be deemed forfeited and ~~shall~~will be removed by ~~the Cemeteries staff~~Metro and disposed without notice.

10.~~04.150~~ 05.180 Markers

(a) Grave Markers ~~shall~~will be limited to no more than ~~one~~two (2) per Grave, and installed ~~at~~within three feet of the head of the Grave.~~-~~ Persons installing a Grave Marker must submit an Installation Authorization Form to Metro depicting and describing the Marker and providing proof that said person is authorized to perform installation by the owner(s) of the Interment~~/Inurnment~~ Right described on the Certificate of Interment and the person with legal right of disposition of the Remains. Exceptions may be approved by the Director or by Rule.

(b) No person ~~shall~~may place any permanent Marker made of a material other than natural stone or bronze metal in a Metro Cemetery.

(c) No person ~~shall~~may place any permanent Marker in a Metro Cemetery unless properly supported with a foundation/collar made of concrete three (3) inches in width, flush with the ground, having no beveled edges. Each foundation/collar must be marked with the Grave, lot and block number of the Cemetery in which it is placed.

(d) Markers and Marker bases ~~shall~~may not exceed the width of the Grave and ~~shall~~may be no larger than the following dimensions:

i. Single Grave ~~————————~~18” x 30”
ii. Companion Graves ~~————————~~18” x 60”
iii. ~~(d)~~ Memorial or vase block 12” x 12”

(e) The installation of any improvement to a Grave other than a Marker is prohibited, unless otherwise approved ~~as set forth in section~~ by the Director. ~~10.04.160.~~

10.~~04.160~~ 05.190 Monuments and Memorials Restricted

(a) Monuments and Memorials are generally prohibited, but may be allowed at the discretion of the ~~Chief Operating Officer or designee~~Director, or as permitted by ~~rules established pursuant to this chapter~~any Rule.

(b) Monuments and Memorials permitted under this section must comply with the requirements for Markers set forth in Section 10.~~04.150(a)-(c),~~05.180, above, and are subject to an additional fee.~~-~~ The owner(s) of the Interment/Inurnment Right and/or the person with legal right of disposition must enter into an Agreement with Metro providing permission to install the Monument or Memorial and releasing Metro from liability for any and all damage or destruction of the Monument or Memorial that may occur.

10.~~04.170~~ 05.200 Marker, Monument, Memorial Repair Restricted

No repairs, restoration or improvements to any Marker, Monument or Memorial is permitted unless performed strictly under the written terms of approval issued by the ~~Chief Operating Officer or designee. Violations of this section are also violations of section 10.04.180~~Director.

10.~~04.180~~ 05.210 Removal of Marker, Monument, Memorials Prohibited

The removal of any Marker, Monument, Memorial or improvement is prohibited unless approved in writing by the ~~Chief Operating Officer or designee. It shall be a violation of this chapter for anyone~~Director. It is unlawful to intentionally damage, alter, or deface any such property.

10.~~04.185~~ 05.220 Cemetery Errors and Irregularities

(a) ~~The Chief Operating Officer or designee~~The Director may preclude an Interment/Inurnment in a Cemetery based on a determination that the ownership of the right of Interment/Inurnment, the location of the Grave, or the ability to open said Grave without intruding upon nearby occupied Graves is in doubt.

(b) When an Interment/Inurnment is precluded by the ~~Chief Operating Officer~~Director under subsection (a), or if for any other reason an Interment/Inurnment space cannot be opened, Metro may elect to direct Interment/Inurnment of Remains in an available Grave in such location in the Cemetery as is deemed reasonably appropriate and reasonably equivalent in value at the sole discretion of the ~~Chief Operating Officer or designee~~Director.

(c) The Chief Operating Officer or designee may correct any errors made by Metro in the description or transfer of Interment/Inurnment Rights, or by its agents in performing Interments/Inurnments, Disinterment or removals, when determined to be necessary in his/her sole discretion. The Chief Operating Officer or designee may void the erroneous grant of any Interment/Inurnment Certificate and provide a refund of the purchase price, or substitute in lieu thereof an Interment/Inurnment Certificate for a Grave selected by Metro within the same Cemetery of equal value and reasonably similar location if possible. ~~-~~In the event such error involves the Interment/Inurnment of the remains of any person, ~~The~~the Chief Operating Officer or designee may, at his/her sole discretion, elect to disinter said remains in accord with state law and reinter them in another available Grave within the same Cemetery, of equal value and reasonably similar location as may be substituted and conveyed as set forth the above.

10.~~04.190~~ 05.230 Rates and Fees for Interment and Inurnment Rights, Burial Services and Perpetual Care Fund

(a) ~~The Chief Operating Officer or designee shall~~The Director will establish rates for the Perpetual Care Fund, sale of Interment/Inurnment Rights for Graves and Niches and ~~shall~~ set fees and charges for ~~Pioneer~~Historic Cemetery goods and services, including Burial and other required or optional services. Said rates, fees and charges ~~shall~~will be designed to recover all costs of operating the Cemeteries and may be adjusted from time to time by the Director without notice, to reflect market rates and to ensure the solvency and financial stability of the Cemeteries.

(b) Interment/Inurnment Right purchasers ~~shall~~must pay the rate, fees and charges on the date of purchase. Except as otherwise set forth in this chapter, no option to purchase rights or other prospective rights to Interment in the ~~Pioneer~~Historic

Cemeteries ~~shall~~may be granted unless approved by resolution of the Metro Council setting forth the terms and conditions of said option or prospective right. Prices, fees and charges for services may vary among Cemeteries, as determined by the ~~Chief Operating Officer~~Director.

(c) ~~The Chief Operating Officer or designee~~The Director may reduce rates, fees and charges for Grave sales and Burial Services in situations of extreme financial hardship or in cases of Wards of the State. ~~-~~All reductions or waivers ~~shall~~must be applied by written order setting forth the facts justifying the waiver or exemption.

10.~~04.220~~ 05.240 Historical Research Requests

Due to the confidentiality and sensitive nature of Cemetery records, Metro will not distribute personal or contact information regarding any Interment/Inurnment Rights performed within the last 50 years from date of inquiry without proof of lineage, except as required by Oregon public records laws.

~~**10.04.230 Other Laws Applicable**~~

~~This chapter shall in no way be a substitute for or eliminate the necessity of conforming with any and all state laws and rules and other ordinances which are now or may be in the future in effect which relate to the activities regulated in this chapter.~~

~~(Ordinance No. 12-1286, Sec. 1, adopted October 4, 2012, effective January 2, 2013.)~~

EXHIBIT D TO ORDINANCE NO. 18-1419

TITLE X

METRO PARKS, CEMETERIES AND NATURAL AREAS

CHAPTER 10.01

DEFINITIONS

10.01.010 Definitions

For the purposes of Title X Metro Parks, Cemeteries and Natural Areas, unless the context requires otherwise, the following terms have the meanings given to them in this Chapter:

Cemetery, Historic Cemeteries, and Cemeteries means the places identified in Section 10.05.040 that are designated, owned and operated by Metro for the disposition of Human Remains (as defined in Section 10.05.030).

Director means the person or persons designated by the Chief Operating Officer to serve as the Director of the Parks and Nature Department, or the Director's designee.

Employee means any paid employee of Metro performing tasks or functions at any Property at the request or direction of either the Chief Operating Officer or his or her designee, or the Metro Council.

Natural Area(s) means any Property managed for purposes of habitat conservation and restoration, including Properties used seasonally for agricultural use complementary to habitat conservation.

Noise disturbance means any sound which injures or endangers the safety or health of humans, annoys or disturbs a reasonable person of typical sensitivities, or harms wildlife.

Park(s) means any Property improved for purposes of recreation, including passive recreation, and open for public use, including regional recreation areas, regional nature parks, and motorized and non-motorized boat launches or ramps.

Parks and Nature Department means Metro's Parks and Nature Department, as the department may be renamed or reorganized from time to time.

Permit means any type of special event, use, camping, or reservation permit issued by Metro.

Person has the meaning set forth in Metro Code Section 1.01.040(h).

Property means land or interests in land owned by Metro and managed by the Parks and Nature Department, including Cemeteries, Parks, and Natural Areas.

Property Rules or Property-Specific Rules means a Rule established by the Director for a specific Property.

Public means any person other than a Metro elected official, officer, Employee, volunteer, contractor or other agent while on duty.

Regional Trail means a pedestrian off-street trail identified on Metro's Regional Trails and Greenways map and found on Metro's website as a Regional Trail.

Rule(s) means rules and regulations adopted by the Director pursuant to Metro Code Title X.

Title X refers to this Title X of the Metro Code (Metro Parks, Cemeteries and Natural Areas).

Vehicle means any wheeled conveyance, whether motor-powered, animal-drawn or self-propelled, including a bicycle, and includes any trailer in tow of any size, kind or description, but does not include (a) baby carriages or strollers, (b) vehicles in the service of the Parks and Nature Department, or (c) manually operated or power-driven devices used for locomotion by an individual with a mobility disability. [Ord. 96-659A, Sec. 1; Ord. 02-978, Sec. 1; Ord. 15-1366.]

CHAPTER 10.02

PERMITS, ENFORCEMENT AND APPEALS

10.02.010 Purpose

The purpose of this Title X is to provide rules and regulations governing the use of Metro's Parks, Cemeteries and Natural Areas by members of the public, in order to protect lands, habitat, wildlife, plants, and improvements, to provide for the safety of employees and visitors, and to further the enjoyment of any person visiting these facilities. Additional rules and regulations governing Cemeteries are set forth in Chapter 10.05. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.02.020 Policy

The Metro Council has determined that it is necessary to adopt these Code provisions in order to further the safe and efficient operation, protection and maintenance of Metro's Parks, Cemeteries and Natural Areas and to protect the health, safety and welfare of the public and Metro's employees; therefore, Title X will be liberally construed to effectuate this purpose. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.02.030 Enforcement Authority

(a) The Director has the authority to enforce all of the provisions of Title X, including but not limited to the authority to enforce any Rules adopted pursuant to this Section.

(b) The Director has the authority to establish Rules that are not inconsistent with the provisions of Title X, including but not limited to, rules governing fees and penalties, Property-Specific Rules, and rules governing Interment and Inurnment, as defined in Chapter 10.05. Said rules must be in writing, posted on Metro's website and filed with the Metro Council.

(c) No Person may violate any Rule established by the Director. [Ord. 96-659A, Sec. 1.]

10.02.040 Exceptions; Authorized Acts by Permit

Notwithstanding anything to the contrary in Title X, the following are not violations of Title X or of any Rules:

(a) The acts of Metro elected officials and Employees constituting official duties.

(b) The authorized acts of Metro-approved volunteers.

(c) The acts of agents and contractors authorized by agreement with Metro.

(d) Acts of third parties or the public officially authorized by agreement with Metro, or by Permit.

10.02.050 Permits Required

No person may, within the boundary of any Property, conduct or participate in any activity for which a Permit is required, unless Metro has issued a Permit for the activity. A Permit is required under the following circumstances and for the following activities:

(a) Film or television filming, production, or commercial photography.

(b) Any organized sporting event or competition, including but not limited to team sports, fishing, water-skiing, disc golf, wakeboarding, track and field, triathlon or duathlon.

(c) Special educational events or festivals, except those specifically hosted by Metro.

(d) Amplified sound, pony rides, dunk tanks, or carnival games.

(e) Consumption of alcohol in designated locations.

(f) Landing of helicopters, small planes, sea planes, float planes or similar.

(g) Camping overnight or longer.

(h) Any organized event or activity involving 25 persons or more, except for picnics where a reservation has been secured.

(i) Any event where the person or persons engaged in the activity seek to exclude, or to have the right to exclude, any member of the public from the activity or from any area of any Property. For example, a reservation is required for a picnic shelter if the person making the reservation seeks to exclude other members of the public from the shelter during the period of the reservation.

(j) Any activity which is otherwise prohibited by this Metro Code Chapter 10.02.

(k) Any use of Historic Cemeteries other than as described in Metro Code Section 10.05.070. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.02.060 Permit Revocation

Any Permit granted hereunder may be revoked at the discretion of the Director or his/her designee, with a full refund. If the Director revokes a Permit under this Section upon a finding of violation of Title X, or any Rule, ordinance, statute, or conditions of the Permit, no refund may be given. [Ord. 96-659A, Sec. 1.]

10.02.070 Display of Permits Required

It is unlawful for any person to:

(a) Fail to produce and display any required Metro Permit or receipt, upon request of any Employee or agent of Metro.

(b) Fail to clearly display at all times, while within the boundaries of any Property, any required proof of parking fee payment or waiver on the dashboard of the person's vehicle so that such proof is plainly visible from the exterior of the vehicle. [Ord. 96-659A, Sec. 1.]

10.02.080 Interference with Permittees Prohibited

No person may disturb or interfere unreasonably with any person or party occupying or participating in any activity in a Property under the authority of a Permit. Unreasonable interference includes, but is not limited to, conduct that substantially prevents any person from viewing or hearing the permitted activity, or substantially preventing the free passage, ingress and egress of event participants or attendees. [Ord. 96-659A, Sec. 1.]

10.02.090 Posting of Rules

Rules and provisions for use and administration of Parks, Cemeteries and Natural Areas, must be in writing, and made reasonably available to the public by, for example and in the discretion of the Director, posting on Metro's website, keeping a copy at each Property office for inspection, posting signage, or by displaying as otherwise required by this Chapter. [Ord. 96-659A, Sec. 1.]

10.02.100 Enforcement Personnel

(a) The Director and the Director's authorized representatives must, in connection with their duties imposed by law, diligently enforce the provisions of Title X and any Rules.

(b) It is unlawful for any person to harass, obstruct, interfere with or disobey the direction of any authorized Metro Employee or agent carrying out the enforcement of Title X or any Rules. [Ord. 96-659A, Sec. 1.]

10.02.110 Citation, Ejectment and Exclusion, Hearing

(a) The Director and the Director's authorized enforcement personnel have the authority to: (i) cite, cite for civil penalties or eject from any Property any person acting in violation of Title X, any Rules, or the laws of the State of Oregon; and (ii) exclude from any Property any person acting in violation of Title X, any Rules, or the laws of the State of Oregon for not more than one (1) year.

(b) Written notice must be given to any person excluded from Metro Property. The notice must specify the violation of Title X, the Rule violated, or the law of the State of Oregon that is the basis for the exclusion and must specify the dates covered by the exclusion. The notice must contain a statement of the person's right to request a hearing and to be represented by legal counsel. The notice must be signed by the issuing party. The consequences of failing to comply with the exclusion notice must be prominently displayed on the notice.

(c) A person receiving an exclusion notice may request a hearing to appeal the exclusion by sending a written request for a hearing to the Director by registered or certified mail.

(d) At any time during the period of the exclusion, a person receiving an exclusion notice may apply in writing to the Director for a temporary waiver from the exclusion. The Director may grant a temporary waiver of an exclusion based upon a showing of good cause for said waiver. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.02.120 Seizure of Property

The Director and any authorized enforcement personnel has the authority to seize and confiscate any property, thing or device held, kept or used in violation of Title X or any Rule. [Ord. 96-659A, Sec. 1.]

10.02.130 Hearing Regarding Seized Property

(a) Persons who have had any personal property, thing or device confiscated under this Chapter may request a hearing to appeal the confiscation by sending a written request for hearing to the Director by registered or certified mail.

(b) The hearing must be conducted in accord with the applicable contested case procedures set forth in Metro Code Chapter 2.05.

(c) Any property, thing or device which was not wrongfully confiscated will become the property of Metro and may be disposed of in a manner to be determined by the Director. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.02.140 Other Laws Applicable

Title X and the Rules adopted under its authority are in no way a substitute for and do not eliminate the necessity of conforming with any and all state laws and rules and other ordinances which are now or may be in the future in effect which relate to the activities regulated in Title X, including but not limited to City or County ordinances containing regulations and prohibitions pertaining to firearms and dangerous or deadly weapons. [Ord. 96-659A, Sec. 1; Ord. 10-1230, Sec. 4.]

10.02.150 Severability

If any section, subsection, sentence, clause, phrase or portion of Title X is for any reason held invalid or unconstitutional by a court of competent jurisdiction, that portion will be considered a separate, distinct and independent provision, and the holding will not affect the validity of the remaining portion of Title X. [Ord. 96-659A, Sec. 1.]

CHAPTER 10.03

RULES AND REGULATIONS

10.03.010 Property Destruction and Other Property Prohibitions

Within the boundaries of any Property, it is unlawful to:

(a) Willfully mark, deface, disfigure, damage, tamper with, displace or remove any property, improvements, fixtures, or equipment, including buildings, restrooms, bridges, tables, benches, grills, fireplaces, railings, fences, gates, paving or paving material, water lines or other public utilities or parts or appurtenances thereof, signs, notices or placards (whether temporary or permanent), monuments, stakes, posts or other boundary markers, other structures or equipment, property or appurtenances whatsoever, either real or personal.

(b) Dig or remove any soil, rock, gravel, stones, or artifacts, or make any excavation by tool, equipment, blasting or other means or agency, including on land or in streams.

(c) Climb, scale, walk, stand, swing, or sit upon monuments, rock walls, planters, fountains, railings, fences or any other feature within a Property that is not designated or customarily used for such purposes.

(d) Fail to stay on designated trails, paths or roads.

(e) Construct, install, add to, remove, maintain, or alter any trail, path, track, fence, gate, course, route, bridge, overpass, culvert or crossing, or construct structures on a Property, such as tree forts or camps.

(f) Use any metal or mineral locating or detecting devices of any kind. [Ord. 96-659A, Sec. 1.]

10.03.020 Tree and Plant Prohibitions

Within the boundaries of any Property, it is unlawful to:

(a) Damage, cut, carve, trim, prune, transplant, remove or destroy any tree, shrub, plant, or seeds, or any part of any tree, shrub or plant, regardless of whether the tree, shrub or plant is dead or alive, including without limitation, damage such vegetation through use of a vehicle, whether the damage is intentional or not, or remove wood for firewood. Use of chain saws is prohibited.

(b) Climb, scale, or swing upon any trees or shrubs not designated for such purposes.

(c) Plant any tree or shrub or other plant on a Property. [Ord. 96-659A, Sec. 1.]

10.03.030 Animal, Bird and Fish Prohibitions

(a) Within the boundaries of any Property, except as stated in Sections (e), (f), and (g) below, it is unlawful to hunt, harass, harm, poison, frighten, kill, trap, chase, shoot, project, or throw projectiles at, any bird, fish or other living creature, or remove or have in possession any wild animal, bird, fish, amphibian, invertebrate, or reptile or the eggs or nest of any reptile or bird, or obtain access to or cross any Property with

the intent to hunt or trap on adjacent lands. Possession of relevant equipment will be deemed sufficient evidence of such intent.

(b) It is unlawful, within the boundaries of any Property, to feed or offer food items to any wildlife or fish.

(c) It is unlawful, within the boundaries of any Property, to release any plant, fish, wildlife, aquarium contents, or other living organism.

(d) It is unlawful, within the bounds of any Property, to place waterfowl decoys or use recorded birdsong, playback, calls, or other audio or mechanical method of attracting birds or other wildlife.

(e) Acts of employees of federal and state agencies, including the United States Fish and Wildlife Service, United States Geologic Society, and Oregon Department of Fish and Wildlife, while performing their official duties will not be deemed a violation of this Section.

(f) Fishing is permitted only where designated by a Property-Specific Rule, and in accordance with applicable rules and regulations promulgated by the Oregon Department of Fish and Wildlife (subject to prohibitions on dangerous weapons set forth in Section 10.03.170, below).

(g) The Director may establish Property-Specific Rules that allow hunting on a limited basis in conformance with federal and state law if the Director finds that it is necessary and beneficial to conservation efforts to control animal populations. [Ord. 96-659A, Sec. 1.]

10.03.040 Pollution of Waters and Soils Prohibited

It is unlawful for any person to bury, release, discharge or otherwise place or cause to be placed in the soils or waters of any fountain, pond, lake, river, stream, bay or other body of water in or adjacent to any Property, any matter or thing, liquid, gas, or solid, which will or may result in the pollution of those waters or soils, including, without limitation, urination or defecation on any Property except in designated restrooms. [Ord. 96-659A, Sec. 1.]

10.03.050 Refuse and Trash Prohibitions

It is unlawful for any person to deposit, dump, place or leave any rubbish, bottles, cans, garbage or refuse of any type regardless of its source in a Property, except refuse, garbage or litter occasioned through lawful use of the Property which must be deposited in appropriate receptacles provided for that purpose. [Ord. 96-659A, Sec. 1.]

10.03.060 Traffic Prohibitions

Within the boundaries of any Property, it is unlawful to:

(a) Fail to comply with all applicable provisions of the state motor vehicles traffic laws in regard to equipment and operation of vehicles, together with such regulations as are contained in Title X, any Rule, and other ordinances.

(b) Fail to obey Employees and agents, which persons hereby are authorized and instructed to direct traffic whenever and wherever needed on any Property and on the highways, streets or roads immediately adjacent to any Property.

(c) Fail to observe and obey all traffic signs indicating speed, direction, caution, stopping or parking, and all other signs posted for proper traffic control and to safeguard life and property.

(d) Drive any motor vehicle, including all-terrain vehicles (ATVs), on any area except roads, parking areas, or such other areas as may be specifically designated by the Director. [Ord. 96-659A, Sec. 1.]

10.03.070 Parking Prohibitions

Within the boundaries of any Property, it is unlawful to:

(a) Park a motor vehicle in a location other than an established or designated parking area or in violation of the posted signage or identified restrictions, or against instruction of an Employee or agent who may be present at an established or designated parking area.

(b) Double park any motor vehicle on a road or parkway, or otherwise park any vehicle such that a vehicle prevents the egress of other vehicles, or park in front of or block a fire lane or Property entry or exit gate, unless directed by an Employee or agent of Metro.

(c) Leave any vehicle parked in any Property after normal operation hours without first obtaining permission from an Employee or agent of Metro.

(d) Leave any vehicle parked or stopped on a boat ramp except while loading or unloading a boat. Vehicles so parked are subject to citation and tow. [Ord. 96-659A, Sec. 1.]

10.03.080 Bicycle Restrictions

Within the boundaries of any Property, it is unlawful to:

(a) Ride a bicycle on other than a vehicular road, trail or path specifically designated and signed for that purpose. A bicyclist is permitted to wheel or push a bicycle by hand in a Park over any mowed area or natural surface or on any paved area reserved for pedestrian use.

(b) Ride a bicycle other than on the right-hand side of the road paving as close as conditions permit. Bicycles must be in single file when two (2) or more are operating as a group. Bicyclists must at all times operate their bicycles with

reasonable regard to the safety of others, signal all turns, and pass to the right of any vehicle they are meeting or overtaking. [Ord. 96-659A, Sec. 1.]

10.03.090 Horseback Riding Restrictions

It is unlawful for any person, within the boundaries of any Property, to ride a horse (including ponies, mules or donkeys) except on trails or areas designated for such purpose. Horses may be loaded and unloaded at designated areas only, must be thoroughly well trained and properly restrained, must be ridden with due care, and may not be allowed to graze or go unattended. Horse droppings must be removed by the rider immediately and disposed of in an area designated for horse trailer parking. [Ord. 96-659A, Sec. 1.]

10.03.100 Domestic Animals Restricted

No person may bring a dog or other domestic animal onto a Property, including within a motor vehicle and on or off leash, except as follows:

(a) The animal is a "Service Animal" or "Animal Trainee" (each as defined by the Americans with Disabilities Act), or the animal is an "Assistance Animal" or "Assistance Animal Trainee" (as defined by ORS Chapter 659A.103 et seq.).

(b) Dogs are permitted on-leash on Regional Trails traversing Metro Property, and on-leash at the Chinook Landing Marine Park, the Farmington Paddle Launch, the M. James Gleason Memorial Boat Ramp, and the Sauvie Island Boat Ramp.

(c) Horses are permitted, subject to Section 10.03.090, above. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.03.110 Bathing and Swimming Restrictions

Within the boundaries of any Property, it is unlawful to:

(a) Swim, bathe or wade in any waters or waterways, except in such waters and at such times and places as are designated, and otherwise in compliance with Title X and all Rules.

(b) Construct, install or use rope swings adjacent to waterways in any Property. [Ord. 96-659A, Sec. 1.]

10.03.120 Boats and Moorages

It is unlawful for any person to:

(a) Disobey any applicable signage posted in boat launching, moorage and beach areas.

(b) Moor a boat or other floating vessel longer than 30 minutes on boarding docks, or 12 hours on transient docks.

(c) Improperly secure a boat or other floating vessel in such a manner as to cause personal injury or damage to property or resources.

(d) Swim, fish, sunbathe, kiteboard, paddleboard, sailboard, wakeboard or water ski in the immediate vicinity of a boat launch or from boat moorage docks. [Ord. 96-659A, Sec. 1.]

10.03.130 Blue Lake Boating Restrictions

It is unlawful to bring into or launch any watercraft of any type from Blue Lake Park, except as provided in subsections (a) through (c), below. All boating activities must be in accordance with applicable rules of the State of Oregon.

(a) Watercraft belonging to residents whose property adjoins Blue Lake. Such watercraft must be identified by the current decal and number of the Interlachen Homeowners Association, or its successor organization.

(b) Watercraft for rent at Blue Lake Park.

(c) Privately-owned watercraft between October 1st and April 30th of each year provided that they do not exceed 14 feet in length or 17 feet for canoes, and 3.0 horsepower in motor capability. [Ord. 96-659A, Sec. 1.]

10.03.140 Fireworks and Explosives Prohibited

Within the boundaries of any Property, it is unlawful to bring, or have in possession, or ignite or otherwise cause to explode or discharge or burn, any firecrackers, torpedoes, rockets or other fireworks or explosives or inflammable material, or discharge them or throw them into any Property from any adjacent land or highway. This prohibition includes any substance, compound, or mixture having properties of such a character that alone or in combination with other substances, compounds or mixtures, propels projectiles, explodes or decomposes to produce flames, combustion, noise, or noxious or dangerous odors. Nothing in this section shall be construed to prohibit firearms or the proper use of charcoal lighter fluid in proper containers in picnic grills where permissible. [Ord. 96-659A, Sec. 1.]

10.03.150 Fires Restricted

Within the boundaries of any Property, it is unlawful to:

(a) Build or attempt to build a fire except in such areas and under such Rules as may be adopted by the Director. All fires must be completely extinguished after use.

(b) Drop, throw or otherwise scatter lighted matches, cigarettes or cigars, tobacco paper or other inflammable material within any Property or on any highway, road or street abutting and contiguous to any Property. [Ord. 96-659A, Sec. 1.]

10.03.160 Firearms Restrictions

Federal, State, County and local ordinances restricting or prohibiting the possession of firearms apply on Metro Property.

10.03.170 Dangerous Weapon Prohibitions

It is unlawful for any person to possess in any Property any object specifically designed for and presently capable of causing, or carried with the intent to threaten or cause, bodily harm to another. Things prohibited under this Section do not include firearms (which are governed by Metro Code Section 10.03.160, above), but include and are not limited to: pellet guns, paintball guns, bow and arrow, spring-loaded weapons, stun guns or tasers, knives having a blade that projects or swings into position by force of a spring or by centrifugal force, any knife with a blade longer than 3-½ inches, any dirk, dagger, ice-pick, sling shot, metal knuckles, martial arts weapons, studded handcoverings, swords, straight razors, tear gas containers, hatchets, axes, or the items described in Section 10.03.180(a), below.

10.03.180 Prohibited Games

Within the boundaries of any Property, it is unlawful to:

(a) Take a part in or abet the playing of any games involving thrown or otherwise propelled objects such as stones, arrows, sharp objects, darts, paintball, or javelins, except as may be permitted in designated areas.

(b) Participate in or use emerging technologies that can harm vegetation or improvements, or involve off-trail activities, such as geocaching, letterboxing and similar activities, or augmented reality applications, except in accordance with applicable Rules. [Ord. 96-659A, Sec. 1.]

10.03.190 Scale Model Equipment, Drones Prohibited

As an owner of real property as described in ORS 837.380, Metro prohibits the use of unmanned aircraft systems (e.g. drones) on its Property. Within the boundaries of any Property, it is unlawful to:

(a) Use or operate any power-propelled model rocket, drone aircraft, glider, wheeled or tracked vehicle or boat, except in areas specifically designated by Metro and posted for such use.

(b) Launch drones from Metro Property or land drones on Metro Property.

(c) Fly any drones at a height of less than 400 feet in the airspace above Metro Property land or water. Metro reserves its rights under ORS 837.380 to recover treble damages and attorneys fees for any trespass in violation of this Section, as permitted by law.

10.03.200 Smoking Prohibitions

It is unlawful to smoke on any Property. "Smoking" means inhaling, exhaling, burning or carrying any lighted pipe, cigar, cigarette, weed, plant, or other combustible organic or chemical substance, the smoke from which is intended to be inhaled or drawn into the nose or mouth. In addition "smoking" includes the use of any vapor device, of any product name or descriptor, which releases gases, particles, or vapors into the air as a result of combustion, electrical ignition, or vaporization intended to be drawn into the nose or mouth (excluding any United States Food and Drug Administration approved nebulized medication).

10.03.210 Consumption of Alcoholic Beverages, Controlled Substances

It is unlawful to bring onto, sell within, or consume alcoholic beverages or controlled substances (as defined by Oregon law) on any Property. [Ord. 96-659A, Sec. 1.]

10.03.220 Public Intoxication Prohibited

Within the boundaries of any Property it is unlawful to behave in any way that leads Metro enforcement personnel to conclude, in their sole discretion, that such person is intoxicated or under the influence of controlled substances.

10.03.230 Improper Exposure; Sexual Activity

Within the boundaries of any Property it is unlawful for any person to expose his or her genitalia while in a place visible to another person or to engage in sexual conduct as defined in ORS 167.060.

10.03.240 Violent and Excessively Loud Conduct Prohibited

Within the boundaries of any Property, it is unlawful to:

(a) Engage in, promote, instigate, encourage, aid or abet fighting or similarly violent conduct which would threaten the physical well-being of any person or animal.

(b) Make, continue, cause or permit to be made or continued any noise disturbance, as defined in 10.01.010.

(c) Use or operate any device designed for sound production, amplification or reproduction in such a manner as to cause a noise disturbance. [Ord. 96-659A, Sec. 1.]

10.03.250 Signs Restricted

Within the boundaries of any Property, and except speech protected by the Oregon and the United States Constitution, it is unlawful to:

(a) Solicit for any public or private purpose.

(b) Distribute or otherwise place any non-authorized printed material on any vehicle parked in a Property.

(c) Paste, glue, tack or otherwise post any sign, decal, placard, advertisement or inscription whatsoever, or cause to be erected any sign whatsoever, except upon permission of the Director or designee. [Ord. 96-659A, Sec. 1.]

10.03.260 Concessions, Vending and Peddling Restricted

(a) Before a person may act as a concessionaire at a Property, the person must secure a Permit in compliance with Metro's standard procedures.

(b) No person may, within the boundaries of any Property, expose, advertise or offer for sale or rent any article, service, or thing, or station or place any stand, cart or vehicle for the transportation, sale or display of any article or thing, unless the person is acting under the authority of a Permit. [Ord. 96-659A, Sec. 1; Ord. 15.1366.]

10.03.270 Posted Hours of Operation

Park hours of operation will be as posted, except for unusual or unforeseen circumstances and emergencies, as determined by the Director. The hours of operation for Parks not posted are legal sunrise to legal sunset. No person may enter or remain in a Park when it is closed. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.03.280 Camping Permits and Restrictions

Within the boundaries of any Property, it is unlawful to:

(a) Camp overnight or longer in any Property without first obtaining a Permit, camp in any manner not specifically provided for in such Permit, or camp at any time or in any place not designated for camping.

(b) Camp if he/she is under the age of 18, unless he/she is accompanied by an adult.

(c) Camp in any Park for longer than five (5) consecutive days, or for longer than ten (10) days in any 30-day period. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.03.290 Closed Areas

All or any section or part of any Property may be declared, posted, signed or otherwise designated closed to the public by the Director at any time and for any interval of time, either temporarily, indefinitely, or at regular and stated intervals, daily or otherwise, and either entirely or merely to certain uses, as the Director may find reasonably necessary. No person may enter any Property posted as "Closed to Public" or "No Public Access." [Ord. 96-659A, Sec. 1.]

CHAPTER 10.04

FEES

10.04.010 Purpose and Authority

It is the purpose of this chapter to establish fees for certain uses at Metro Property pursuant to Metro Code Section 10.02.030. The Chief Operating Officer, or his or her designee, may set additional fees, or adjust any fees established herein. If the Chief Operating Officer elects to set additional fees or adjust any fees established pursuant to this Chapter 10.04, the Chief Operating Officer will provide the Metro Council with 45 business days notice prior to the effective date of the fee or fee adjustment. Upon notice of the additional fee or fee adjustment, the Metro Council may elect to affirm or modify the additional fee or fee adjustment by resolution of the Metro Council. The fee or adjusted fee may thereafter be adjusted as set forth in this Metro Code Section 10.04.010. [Ord. 96-659A, Sec. 1.]

10.04.020 Fees

Metro will charge and collect the following use and activity fees:

(a) Parking fees at Blue Lake Park, Chinook Landing Marine Park, M. James Gleason Memorial Boat Ramp, and Oxbow Park, and fees for annual parking passes at these locations.

(b) Reservation fees for shelters and reservable picnic areas at Blue Lake, Oxbow Park, Scouters Mountain, Graham Oaks, and Howell Territorial Parks.

(c) Fees for overnight camping, including fees for nightly use of overnight group camps.

(d) Rental fees, and security deposits for the Lake House at Blue Lake Park.

(e) Permits for which the Chief Operating Officer, or his or her designee, has determined a fee is required. [Ord. 96-659A, Sec. 1; Ord. 98-722, Sec. 1; Ord. 01-894, Sec. 1; Ord. 02-978, Sec. 1; Ord. 03-1008; Ord. 04-1047, Sec. 1; Ord. 06-1109; Ord. 07-1166; Ord. 09-1211A; Ord. 15-1366.]

10.04.030 Fee Waivers or Suspensions

(a) No parking fees will be charged for any on-duty police officer or off-duty Metro Employee who presents valid current identification at the Property entrance.

(b) Parking fees and camping fees will be waived for any disabled veteran who presents valid current photo identification and an Oregon State Parks Special Access Pass for Veterans with Service Connected Disabilities ID Card, and places a green placard issued by Oregon State Parks in said veteran's vehicle in full view on the dashboard or hanging from the rear-view mirror. Free camping under this Section requires a reservation and is otherwise limited by Section 10.03.280.

(c) Collection of any fee under this Chapter may be waived or suspended by order of the Director for such period of time as the order may provide. The Director will develop and implement a written policy to guide decisions related to the waiver or suspension of fees. [Ord. 96-659A, Sec. 1; Ord. 15-1366.]

10.04.040 Use Without Required Fee Prohibited

It is unlawful to engage in a use or activity on any Property for which there is a required fee without first paying the fee. Any person engaged in a use or activity on a Property for which there is a fee will be required to produce and exhibit the receipt or other satisfactory proof of payment upon request of any Employee or authorized enforcement personnel for the purpose of enforcing compliance with this Chapter or any Rules. [Ord. 96-659A, Sec. 1.]

CHAPTER 10.05

HISTORIC CEMETERIES

10.05.010 Purpose

The purpose of this chapter is to provide regulations controlling the operation of Metro owned and operated Historic Cemeteries and governing the use of these Cemeteries by members of the public in order to protect and preserve the Historic Cemeteries, the Graves and the Remains of those interred therein. [Ord. 12-1286, Sec. 1.]

10.05.020 Policy

The Metro Council has determined that it is necessary to adopt this Chapter in order to ensure the long-term stability of Metro's cemetery operations, which will be achieved by Cemeteries being operated as follows:

(a) In compliance with applicable state laws;

(b) As community assets;

(c) In a manner that will maximize public financial benefit and long-term stability; and

(d) To protect and preserve their historically significant nature.

All four above objectives are to be considered equally important in the management of Metro's Historic Cemeteries. [Ord. 12-1286, Sec. 1.]

10.05.030 Definitions

For the purposes of this Chapter, unless the context requires otherwise, the following terms have the meanings given to them below:

Preneed means the sale and purchase of an Interment Right to a predetermined Grave in advance of use for any person to whom the owner designates for Burial in the predetermined Grave.

At-Need means at the time of death sale of Graves/plots, services, memorials and materials which are to be delivered immediately or upon delivery to the Cemetery for immediate Interment.

Burial means the placement of Human Remains in a Grave, in accord with state law and regulations.

Burial Services means the opening and closing of the Grave in accord with state law and regulations, including excavation and fill, the provision and placement of a concrete liner or vault and any overtime charges that apply.

Certificate of Interment Rights or **Certificate** is a perpetual right to use property for burial purposes. The fee title of the property is without possession of any estate or interest in the land and all rights of ownership therein remain with Metro.

Cremated Remains means the remains of a cremated human body after the completion of the cremation process.

Contract of Purchase or **Contract** is an agreement between Metro and the purchaser of Burial Services or an Interment Right to a Grave space, Niche, or Ossuary.

Disinterment is the removal of Human Remains from a Grave space as defined in ORS 97.220.

Family Plot means a group of contiguous Graves sold for the purpose of the Interment or Inurnment of related individuals as set forth and governed by ORS 97.560-650.

Grave means a space of ground in a Cemetery used or intended to be used for Interment or Inurnment.

Human Remains or **Remains** are the body of a deceased person in any stage of decomposition.

Interment is the disposition of Human Remains by entombment or Burial in a place used or intended to be used and dedicated for Cemetery purposes.

Inurnment is the placement of cremated Human Remains by entombment or Burial in a place used or intended to be used and dedicated for Cemetery purposes.

Marker means a flat Grave tablet or headstone placed flush to the ground, identifying a Grave or Graves.

Memorial means a nameplate or inscription identifying a crypt or Niche, or any other improvement or permanent structure intended to identify the location of a Grave or Graves, other than a Marker or a Monument.

Monument means an upright or vertical headstone or tombstone identifying a Grave or Graves.

Niche means a space in a structure to place cremated Human Remains of one or more persons.

Ossuary means is a communal below-ground depository for cremated Remains.

Outer Burial Container is a concrete or composite material container which is buried in the ground to provide outer protection and into which Human Remains or Cremated Remains are placed for Burial purposes.

Perpetual Care Fund is a special account set aside for holding of funds used for the required perpetual maintenance of the Cemetery grounds.

10.05.040 Description of Historic Cemeteries

The areas dedicated for Interment purposes by Metro consist of the following properties:

(a) Brainard Cemetery located at NE 90th Ave. and NE Glisan St., Portland

(b) Columbia Pioneer Cemetery located at NE Sandy Blvd. and NE 99th Ave., Portland

(c) Douglass Pioneer Cemetery located at Hensley Road and SE 262nd Avenue, Troutdale

(d) Escobar Cemetery located at SW Walters Road and Littlepage Road, Gresham

(e) Gresham Pioneer Cemetery located at SW Walters Road, Gresham

(f) Grand Army of the Republic Cemetery located at SW Boones Ferry Road and Palatine Road, Portland

(g) Jones Cemetery located at SW Hewitt Blvd. and SW Humphrey Blvd., Portland

(h) Lone Fir Cemetery located at SE 26st Ave. and SE Stark St., Portland

(i) Mt. View-Corbett Cemetery located at Smith Road and Evans Road, Corbett

(j) Mt. View-Stark Cemetery located at SE Stark Street and SE 257th Street, Gresham

(k) Multnomah Park Cemetery located at SE 82nd Ave. and SE Holgate Blvd., Portland

(l) Pleasant Home Cemetery located at Bluff Road and Pleasant Home Road, Gresham

(m) Powell Grove Cemetery located at NE Sandy Blvd. and NE 122nd Ave., Portland

(n) White Birch Cemetery located at SW Walters Road, Gresham

10.05.050 Operation and Administration

Metro will operate and maintain its Cemeteries in accordance with Title X and all other applicable laws.

10.05.060 Cemetery Hours of Operation

(a) Metro's Cemeteries are open to the public from 7:00am to legal sunset. Hours of operation will be posted at each Cemetery.

(b) Entering or remaining in a Cemetery outside of normal operating hours without obtaining prior authorization from Metro is a violation subject to Ejectment and Exclusion from the Cemetery as set forth in Metro Code Section 10.02.110.

(c) Interments and Inurnments may take place between the hours of 8:00 am and 3:30 pm daily, with the exception of Saturdays, Sundays and legal holidays. Interments and Inurnments may be made outside of these hours at the discretion of the Director, for an additional fee.

10.05.070 Other Uses

Uses other than Interment, Grave visitation, passive recreation, and historical research are prohibited unless specifically provided by Special Use Permit issued pursuant to Chapter 10.02.

10.05.080 Sale of Interment Rights and Burial Services

(a) Interment Rights to a Grave may be sold by Metro both in advance (Preneed) or At-Need, by Contract of Purchase. Purchasers must pay the full fee for Interment Rights on the date of sale. Upon payment, Metro will issue the purchaser a Certificate of Interment Rights.

(b) Burial Services and goods may be sold At-Need through a Contract of Purchase.

(c) Fees and charges for Burial Services and goods must be fully paid before Interment/Inurnment will be permitted. Exceptions may be made at the discretion of the Director.

(d) Metro will retain ownership and control of all Graves or Niches sold, subject to the terms of the Certificate of Interment Rights.

10.05.090 Multi-Interment/Inurnment Right Sales Restricted

(a) Except as set forth in this Section, below, the sale by Metro of a group of Interment Right Certificates is prohibited.

(b) A group of contiguous Interment Right Certificates for contiguous Graves may be sold to one family or individual for the purposes of creating a Family Plot.

(c) A group of Interment Right Certificates other than a Family Plot may be sold upon the adoption of a resolution by the Metro Council approving an agreement establishing terms, including the rates and terms of resale. A one-time administrative fee set at the discretion of the Chief Operating Officer or designee must be charged in addition to regular fees and rates.

10.05.100 Transfer of Certificate of Interment Rights

(a) Interment/Inurnment Rights, whether conveyed by the Historic Cemeteries to the recipient by Deed, Certificate or other means, cannot be sold, transferred, bartered, exchanged or assigned (hereafter "Transfer(red)") to any other person or entity without the prior written consent of the Chief Operating Officer or designee, in accordance with Oregon Revised Statutes Chapter 97 and as set forth in section 10.04.070.

(b) If an owner of an Interment Right seeks permission from Metro to Transfer an Interment Right, Metro will have the first right to buy back said Interment Right from the owner for the price paid when the Interment Right was originally sold.

(c) No attempted Transfer of an Interment Right will be complete or effective unless it has been approved by Metro and recorded in the Metro Cemetery records.

(d) A one-time administrative fee set at the discretion of the Chief Operating Officer or designee must be charged for all Transfers.

(e) The above set forth notwithstanding, the Transfer Interment/Inurnment Rights within Family Plots to family members in accord with Oregon Revised Statute Chapter 97 is permitted without fee or other charge.

(f) Except as set forth in written agreements entered into by Metro prior to the first effective date of this Section 10.05.100 (January 2, 2013), the sale of Interment Rights by purchasers to third parties for more than the rate charged by Metro on the date of such sale is prohibited.

10.05.110 Full Body Grave Dimensions – Burial Limits

A single Grave must measure 40 inches by 9 feet and may contain up to two (2) caskets and six (6) urns, unless otherwise authorized at the sole discretion of the Director or by Rule.

10.05.120 Outer Burial Containers Required

Metro approved Outer Burial Containers are required for all Interments/Inurnments in Metro Cemeteries with the exception of any niche.

10.05.130 Disinterment

(a) Unless ordered by the State Medical Examiner or a court having jurisdiction over Metro Cemeteries, Remains interred in a Grave at any Metro Cemetery may be disinterred only upon the written consent of the Chief Operating Officer or designee and the person having the right to control the disposition of said Remains, and in accordance with applicable state law.

(b) If Disinterment is needed by Metro and consent of the person having the right to control the disposition of said Remains cannot be obtained or such person cannot be located, the Chief Operating Officer or designee may apply to the Multnomah County Circuit Court for permission to disinter. Said application must be submitted only after notice of application to the Metro Council.

10.05.140 Flowers Funerary Decorations Restricted

(a) All flowers, funerary decorations and plants on Graves in violation of this section, and/or that conflict with normal grounds maintenance, will be forfeited, removed and disposed without notice.

(b) All flowers, funerary easels and decorations placed on a Grave at the time of a funeral and not removed within three (3) weeks after the Interment are subject to removal and disposal by Metro.

(c) All flags, flowers and plants placed on Graves on Memorial Day and not removed within three (3) weeks after Memorial Day are subject to removal and disposal by Metro.

(d) Artificial flowers and plants are prohibited between March 1st and November 15th of each year, except for a period of three weeks after Memorial Day observance.

(e) All flowers, funerary easels and decorations will be subject to removal and disposal by Metro when they become withered, faded or otherwise unsightly, in Metro's sole discretion.

10.05.150 Personal Effects and Mementos Prohibited

Personal property, including but not limited to, sacred objects, photographs, toys, clothing, glassware, banners, pin-wheels, chimes, balloons or staked items, left in the Cemetery or placed on or near a Grave is prohibited, except as otherwise permitted in writing by Metro

at the discretion of the Director. Said personal property will be forfeited, removed by Metro and disposed without notice or other process.

10.05.160 Planting On or Around Graves Prohibited

Planting of trees, shrubs or any other plant material, except turf grass, on Graves or their borders is prohibited, unless approved in writing by the Director.

10.05.170 Grave Improvements Prohibited

Grave improvements other than Metro approved Markers, Monuments and Memorials are prohibited. The placement or installation by any person of temporary or permanent improvements covering, bordering or indicating the boundaries of Graves, including but not limited to posts and fences of any kind, walls, coping or curbs of concrete brick, stone or marble, is prohibited. Memorials and improvements so placed or installed will be deemed forfeited and will be removed by Metro and disposed without notice.

10.05.180 Markers

(a) Grave Markers will be limited to no more than two (2) per Grave, and installed within three feet of the head of the Grave. Persons installing a Grave Marker must submit an Installation Authorization Form to Metro depicting and describing the Marker and providing proof that said person is authorized to perform installation by the owner(s) of the Interment Right described on the Certificate of Interment and the person with legal right of disposition of the Remains. Exceptions may be approved by the Director or by Rule.

(b) No person may place any permanent Marker made of a material other than natural stone or bronze metal in a Metro Cemetery.

(c) No person may place any permanent Marker in a Metro Cemetery unless properly supported with a foundation/collar made of concrete three (3) inches in width, flush with the ground, having no beveled edges. Each foundation/collar must be marked with the Grave, lot and block number of the Cemetery in which it is placed.

(d) Markers and Marker bases may not exceed the width of the Grave and may be no larger than the following dimensions:

i. Single Grave 18” x 30”
ii. Companion Graves 18” x 60”
iii. Memorial or vase block 12” x 12”

(e) The installation of any improvement to a Grave other than a Marker is prohibited, unless otherwise approved by the Director.

10.05.190 Monuments and Memorials Restricted

(a) Monuments and Memorials are generally prohibited, but may be allowed at the discretion of the Director, or as permitted by any Rule.

(b) Monuments and Memorials permitted under this section must comply with the requirements for Markers set forth in Section 10.05.180, above, and are subject to an additional fee. The owner(s) of the Interment/Inurnment Right and/or the person with legal right of disposition must enter into an Agreement with Metro providing permission to install the Monument or Memorial and releasing Metro from liability for any and all damage or destruction of the Monument or Memorial that may occur.

10.05.200 Marker, Monument, Memorial Repair Restricted

No repairs, restoration or improvements to any Marker, Monument or Memorial is permitted unless performed strictly under the written terms of approval issued by the Director.

10.05.210 Removal of Marker, Monument, Memorials Prohibited

The removal of any Marker, Monument, Memorial or improvement is prohibited unless approved in writing by the Director. It is unlawful to intentionally damage, alter, or deface any such property.

10.05.220 Cemetery Errors and Irregularities

(a) The Director may preclude an Interment/Inurnment in a Cemetery based on a determination that the ownership of the right of Interment/Inurnment, the location of the Grave, or the ability to open said Grave without intruding upon nearby occupied Graves is in doubt.

(b) When an Interment/Inurnment is precluded by the Director under subsection (a), or if for any other reason an Interment/Inurnment space cannot be opened, Metro may elect to direct Interment/Inurnment of Remains in an available Grave in such location in the Cemetery as is deemed reasonably appropriate and reasonably equivalent in value at the sole discretion of the Director.

(c) The Chief Operating Officer or designee may correct any errors made by Metro in the description or transfer of Interment/Inurnment Rights, or by its agents in performing Interments/Inurnments, Disinterment or removals, when determined to be necessary in his/her sole discretion. The Chief Operating Officer or designee may void the erroneous grant of any Interment/Inurnment Certificate and provide a refund of the purchase price, or substitute in lieu thereof an Interment/Inurnment Certificate for a Grave selected by Metro within the same Cemetery of equal value and reasonably similar location if possible. In the event such error involves the Interment/Inurnment of the remains of any person, the Chief Operating Officer or designee may, at his/her sole discretion, elect to disinter said remains in accord with state law and reinter them in another available Grave within the same Cemetery, of equal value and reasonably similar location as may be substituted and conveyed as set forth the above.

10.05.230 Rates and Fees for Interment and Inurnment Rights, Burial Services and Perpetual Care Fund

(a) The Director will establish rates for the Perpetual Care Fund, sale of Interment/Inurnment Rights for Graves and Niches and set fees and charges for Historic Cemetery goods and services, including Burial and other required or optional services. Said rates, fees and charges will be designed to recover all costs of operating the Cemeteries and may be adjusted from time to time by the Director without notice, to reflect market rates and to ensure the solvency and financial stability of the Cemeteries.

(b) Interment/Inurnment Right purchasers must pay the rate, fees and charges on the date of purchase. Except as otherwise set forth in this chapter, no option to purchase rights or other prospective rights to Interment in the Historic Cemeteries may be granted unless approved by resolution of the Metro Council setting forth the terms and conditions of said option or prospective right. Prices, fees and charges for services may vary among Cemeteries, as determined by the Director.

(c) The Director may reduce rates, fees and charges for Grave sales and Burial Services in situations of extreme financial hardship or in cases of Wards of the State. All reductions or waivers must be applied by written order setting forth the facts justifying the waiver or exemption.

10.05.240 Historical Research Requests

Due to the confidentiality and sensitive nature of Cemetery records, Metro will not distribute personal or contact information regarding any Interment/Inurnment Rights performed within the last 50 years from date of inquiry without proof of lineage, except as required by Oregon public records laws.

STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 18-1419, FOR THE PURPOSE OF AMENDING METRO CODE TITLE 10 TO UPDATE THE PARKS, CEMETERIES AND NATURAL AREA RULES AND REGULATIONS

Date: April 5, 2018

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Adoption of Ordinance No. 18-1419 will amend Metro Code Title 10 (Parks, Cemeteries and Natural Areas) to add, remove and revise certain provisions as described in this staff report. This ordinance will also make various non-substantive technical amendments to the title to streamline and improve clarity and consistency.

BACKGROUND

Title 10 of the Metro Code sets forth the regulations governing the use of Metro owned parks, cemeteries and natural areas in order to protect land, habitat, wildlife, water quality and improvements, and to provide for the safety and enjoyment of visitors and staff visiting these places. Title 10 applies to all of the parks, natural areas, trails, and cemeteries that Metro owns and/or manages (hereafter "Metro property"). It supports Metro's delivery of its parks and nature mission: to protect water quality and fish and wildlife habitat, and create opportunities for people to enjoy nature close to home through a connected system of parks, trails and natural areas.

There is an inherent tension in the parks and nature mission. Providing people with access to nature has well-documented physical, psychological and spiritual health benefits. People who have contact with nature learn to care about the environment, which can translate to personal conservation practices, volunteerism, voter support, and funding to protect and restore nature. At the same time, recreational uses of natural spaces—whether by people on foot, bicycle or horse, and with or without pets—impacts the plants, fish and wildlife living in these areas. Unmanaged, these impacts can undo many of the benefits these areas provide. Metro Code Title 10 is a key mechanism for balancing the various public uses of Metro property and minimizing the impacts of those uses where possible.

Title 10 is due for a comprehensive update in several respects. Many provisions of Title 10 were taken from Multnomah County regulations with the initial transfer of county parks and cemeteries to Metro. Over the years, some of these rules have become duplicative and certain provisions and chapters are no longer necessary or relevant. It has been several years since Metro has significantly updated Title 10. In that time, Metro's parks and natural areas system has grown significantly, with new natural areas acquired and new parks recently opening to the public, plus an additional six parks anticipated to open in the next few years. In 2016 the Parks and Nature System Plan was adopted that defines Metro's role in the region as an open space provider, and provides a framework for revisions to Title 10. The Parks and Nature department has also

evolved, with department reorganization in 2016 and related changes to how Title 10 is enforced. Refining Title 10 to address current needs and be more clear and consistent helps provide the public with a thorough understanding of the rules that govern these public spaces, enhancing Metro's transparency.

Additional impetus for this project was significant interest by external stakeholders in including or expanding certain uses of Metro parks and natural areas, such as the presence of dogs, horses, hunting, and off-road cycling. These issues frequently arise during access planning for new parks and natural area sites. New circumstances have also emerged that have implications for how Metro manages the sites, such as the growing popularity of recreational drones and the legalization of marijuana.

TITLE 10 UPDATE PROCESS

Over the past year, an internal Parks and Nature team completed a thoughtful process to consider how these and other issues are, or should be, addressed by the parks and natural area rules, particularly in light of Metro's commitment to the region to protect water quality and wildlife habitat. The process to adopt Ordinance 18-1419 amending the Metro Code provides an opportunity for the public to comment on the proposed changes. In addition, detailed input on proposed changes to Title 10 was provided by the following key stakeholders:

- An external "Sounding Board." JLA Public Involvement, a public engagement firm with extensive experience working with public agency processes, was hired to design and facilitate an engagement process to help Metro consider diverse perspectives. Eight members of the public met three times as a "Sounding Board" to take a deep dive into Title 10 and provide input on whether and how individual rules should be updated. The results of the Sounding Board process are summarized below, and in more detail in JLA's final report, attached as Attachment 1.

- Connect With Nature community partners. Connect With Nature is a Parks and Nature program through which Metro and leaders representing diverse communities work together to help Metro develop and manage inclusive and welcoming parks and natural areas. Four Connect With Nature community leaders reviewed Title 10 and provided input and suggestions for improvements.

- Enforcement agency partners. Input was solicited from agencies that are responsible for enforcing Metro rules on parks that Metro does not manage, such as Mount Talbert Nature Park, and agencies that have Metro parks in their jurisdictions. These included enforcement teams of City of Portland, City of Happy Valley, North Clackamas Parks and Recreation Department, Tualatin Hills Parks and Recreation District, the three county sheriff offices, Gresham Police Department, and Multnomah County River Patrol. Additionally, Metro engaged with several staff at Oregon Department of Fish and Wildlife, and with Metro's Regional Illegal Dumping (RID) program.

- Natural Areas Oversight Committee. Staff presented the project to update Title 10 twice to the oversight committee for input.

- Parks and Nature staff. Staff across the department provided feedback on the current rules and potential updates. In particular, conservation (science and land management) staff provided technical information on the impacts of various options on fish, wildlife,

plants and water quality, and enforcement staff provided valuable insight into how the current rules are working on the ground from a visitor service, safety and overall effectiveness perspective. Parks and Nature's Intertribal Cultural Resource Specialist was consulted, as well.

PROPOSED AMENDMENTS TO TITLE 10

The outcome of the engagement described above is a set of proposed amendments to Title 10 that clarify or update the regulations to more effectively manage uses of Metro properties while protecting habitat, water quality and park and cemetery improvements, and supporting the safety of both visitors and staff. These amendments are summarized below in the order they appear in the amended version of Title 10 in Ordinance 18-1419.

It is important to note that the Parks and Nature **"special use" permit** process provides an additional mechanism for approving certain uses of Metro properties. Metro allows almost any use of the parks, cemeteries, and natural areas it manages so long as the uses are consistent with the Parks and Nature mission, safety and site-specific considerations. Even for uses precluded or restricted by Title 10 or property-specific rules, the special use permit procedures allow members of the public to request a permit to engage in those uses. These permits are issued on a case-by-case basis, depending on the proposed use, site(s) involved, and other considerations such as sensitivity of habitat and visitor experience impacts.

1. Reorganization of Title 10 and non-substantive "housekeeping" updates:

This ordinance proposes to reorganize Title 10 into the following five chapters:

- 10.01 Definitions
- 10.02 Permits, Enforcement and Appeals
- 10.03 Rules and Regulations
- 10.04 Parks and Nature Fees
- 10.05 Historic Cemeteries

This reorganization eliminates several areas of duplication. For example, there are duplicative enforcement provisions in multiple chapters in Title 10; the amended version would consolidate these provisions in a single chapter (10.02). In addition, the amended version includes non-substantive "housekeeping" changes to remove excess or non-relevant words and add language where needed for clarity or specificity. An example is the proposed removal of the antiquated prohibition on "games of chance" (former section 10.01.250). An example of a rule change intended to increase Metro's transparency is the proposed addition of detail about how Metro can post the rules so they are accessible to the public.

2. Metro can issue a formal exclusion from a park or natural area for up to one year.

This ordinance recommends that Metro's right to exclude people from the park be reduced to no more than one year. Currently Metro Code 10.01.400 authorizes Metro to exclude from a park any person acting in violation of the rules or the laws of the State of Oregon for an undefined period of time, with exclusions of more than one year to be approved by the Parks and Nature Director.

3. Enable Parks and Nature Director to establish property-specific rules to allow hunting if Metro determines it is necessary for conservation efforts.

This ordinance proposes adding a provision to allow the Parks and Nature Director to establish property-specific rules to allow hunting if Metro, in its discretion, determines it is necessary for achieving conservation objectives. Metro Code 10.01.160 bans hunting, and to date no exceptions to this policy have been made. With the acquisition of large properties such as the 1,600-acre Chehalem Ridge Natural Area, some members of the public have expressed an interest in changing Metro's rules to allow hunting of deer and elk at some Metro properties. In addition, there is interest by some in allowing hunting of duck and other waterfowl at sites such as Killin Wetlands, Smith and Bybee Wetlands Natural Area and the Multnomah Channel Natural Area.

In many, if not most, cases hunting does not align with the conservation goals for Metro properties. Metro views its role in the region as supporting these lands and their water features to provide important habitat for wildlife species to rest, breed, and rear young, and then these species are available for hunting on lands where the activity is more appropriate. However, there may be some cases in which a limited hunt at certain sites would benefit conservation efforts. For example, a targeted hunt could help manage wildlife where the population grows to such a size that it negatively impacts the establishment of native vegetation that supports multiple species.

Allowing hunting would need to overcome significant management challenges and would require substantial resources to implement. Hunting impacts both vegetation and wildlife from people traveling off established trails. Impacts to wildlife include noise from firearms and pollution from lead bullets/shots, and limits Metro's ability to create and sustain areas where wildlife can rest, feed and reproduce. It also poses safety risks to other site users. Even a limited hunt would require careful coordination with wildlife management agencies and partners including Oregon Department of Fish and Wildlife and Oregon Hunters Association, and that Metro develop a new system to issue and monitor permits/tags. It would require Metro to prevent or restrict other uses (hiking, cycling, equestrian riding, etc.) while hunts take place to ensure safety. Additional monitoring would likely be needed to ensure that permitted hunting levels are appropriate to wildlife population levels. Metro does not currently have the resources to design, implement and monitor hunting on Metro properties.

Given these challenges and Metro's mission of conserving and protecting fish and wildlife species, this provision was crafted to emphasize that hunting would only be permitted on an extremely narrow basis solely for conservation purposes, to be determined at Metro's discretion. As conservation management is an evolving science, Metro will look at those opportunities individually as they arise and engage with the Metro Council for future adjustments to hunting-related rules and regulations in the Metro Code as needed.

4. Allow dogs and other pets on-leash on regional trails that pass through Metro property and certain motorized boat ramps; otherwise maintain current pet policy.

This ordinance proposes formalizing Metro's current practice of allowing dogs and other pets to be on Metro property when traversing via a regional trail and at most of Metro's boat ramps, and otherwise maintaining the ban on domestic animals on Metro property, except for assistance animals.

This recommendation to largely maintain the current pet policy is based on two main factors: the impacts of pets on wildlife and water quality, and the impacts of pets on people. The topic of Metro's pet policy often comes up when Metro is planning for public access at a new site. Some members of the public have expressed interest in changing Metro rules to allow dog walking at some or all Metro park and natural

areas, saying they'd like the opportunity to enjoy these sites with their pets. Other residents have expressed support for Metro's current rules, saying they feel more comfortable without pets present or appreciate having a place where protection of wildlife is the priority.

The evidence that dogs negatively impact wildlife is overwhelming. It is clear that people with dogs—on leash or off leash—are much more detrimental to wildlife than people without dogs. In April 2016, Parks and Nature's senior scientists conducted an extensive review of current and relevant scientific research on the impacts of dogs on wildlife and water quality (report attached as Attachment 2). Numerous studies demonstrate that dogs impact wildlife by causing physical and temporal displacement (i.e., wildlife move away from dogs, temporarily or permanently, thus reducing the habitat available for them to feed, breed and rest). The scent of dogs repels wildlife, and these effects remain after dogs are gone. Animals become alarmed and cease routine activities in the presence of dogs, and such repeated stress causes long-term impacts on wildlife including reduced reproduction and growth, suppressed immune system and increased vulnerability to disease and parasites. These impacts to wildlife are cumulative—they result from a steady stream of dogs, not from introducing an occasional dog into a site. Dogs also transmit diseases to wildlife, such as canine distemper and rabies, and dog waste pollutes water and can transmit harmful parasites and diseases to people.

The staff recommendation is also based on the negative impacts that dogs can and do have on the experience of some visitors to parks and natural areas. This is particularly true of some members of underserved and historically marginalized communities. Feedback received from several of the Sounding Board members and Connect With Nature community partners suggests that underrepresented groups may perceive dogs as a threat and not feel comfortable accessing parks with them present.

The Sounding Board did not reach consensus on the issue of dogs and other domestic animals at Metro properties, and reflected diverse views on whether and to what extent Metro should allow dogs in parks and natural areas. Most of the members do not support expanded access for dogs out of concern for impacts to wildlife and people, and feel the current policy is appropriate and appreciate the exceptions it already makes for regional trails and boat ramps. A couple of members felt that this disturbance is not severe enough to warrant a complete prohibition on dogs, and strongly advocate for allowing dogs on leash at most natural areas. The range of viewpoints on this topic is reflected in the Sounding Board final report attached as Attachment 1.

Metro views its park system as part of a larger regional network of parks, trails and natural areas, with different park different providers meeting different needs. People have many options when they want to spend time outdoors with their pets, but few places focused on protecting sensitive habitat and providing a unique experience in nature. Among the 100 largest cities in America, Portland leads the country with the most off-leash dog parks per capita — 5.4 such parks per 100,000 residents — according to the 2015 City Park Facts report from The Trust for Public Land. Additionally, there are larger, more natural areas available for exploration with pets, such as Forest Park, Sandy River Delta, Tryon Creek, Powell Butte, Stub Stewart State Park, and in large tracts of state and federal land framing the Portland region. Metro has contributed over $40 million from two bond measures to parks and natural areas that allow dogs.

5. <u>Add reference to existing geocaching/letterboxing guidelines; no substantive changes to rules addressing foraging.</u>

Staff considered whether Title 10 adequately addresses two growing recreational uses of Metro parks and natural area properties that have the potential to impact built park and natural area features: geocaching/letterboxing and foraging.

This ordinance recommends more explicitly prohibiting geocaching and letterboxing except where it is allowed per existing guidelines that govern these activities on Metro properties. Geocaching is a popular recreational activity around the world of scouting for and finding a geocache, or container, by means of GPS coordinates posted on a website. Geocaches typically contain trinkets for finders to exchange. Letterboxing is a similar activity, but letterbox caches usually contain rubber stamps for seekers to stamp a "passport." While geocaching and letterboxing benefit the people engaged in these activities by encouraging more time spent outside exploring nature, these activities can negatively impact both the built and natural features of parks and natural areas—particularly where the caches are made deliberately hard to find and located off trails and in sensitive habitat areas. In order to prevent these harms, Metro implemented geocaching and letterboxing guidelines in 2011 and updated them in 2017. The guidelines, available on Metro's website, lists approved geocaching sites and requires caches to be registered on www.geocaching.com, among other requirements.

Foraging for materials such as berries, roots, bulbs or mushrooms is another growing activity in parks, and especially natural areas. While small-scale harvest for personal consumption is unlikely to cause significant damage to sensitive habitat and wildlife, negative impacts can be compounded where activities take place off trails, and involve more sizable harvests and/or by many people over time. The current rules prohibiting damage to vegetation and other natural features effectively prohibit foraging. In addition, this ordinance proposes adding an explicit requirement that people stay on designated trails, paths and roads (this additional will also help prevent establishment of "demand" trails). The Special Use Permit process is available for members of the public to request exceptions to these rules on a case-by-case basis. Metro has developed a streamlined process to issue Cultural Resource Use Permits, which would apply to culturally-relevant harvesting of natural materials, such as the harvest of camas bulbs by Native American communities at Quamash Prairie Natural Area.

6. Prohibit the use of drones on Metro properties.

This ordinance proposes adding unmanned aircraft (i.e., drones) to the "prohibited games" provision that prohibits power-projected model airplanes and boats at Metro properties. Since Title 10 was adopted there has been dramatic growth in the operation of drones. As drones have become more affordable and easier to operate, recreational drone users are looking for places to use them. Although drone use remains relatively infrequent at Metro properties at this point, field staff report continuing to see more of this use and it can be expected to continue to increase.

Drone operations have the potential to cause harm to visitors and pose safety risks. They can disturb the visitor experience by causing noise pollution, invading personal space (particularly since many drones have cameras), and impacting viewsheds. Drones can also negatively impact wildlife, particularly birds but also ground-dwelling species. The proposed prohibition on the use of drones at Metro Properties will reduce or eliminate these impacts on people and wildlife. It protects both conservation values and the visitor experience for all park and natural area users, consistent with the Parks and Nature mission.

Were this provision to be adopted, drone operators could apply for a special use permit to operate drones for specific purposes (for example, to conduct research or photography). These permit applications would be evaluated on a case-by-case basis pursuant to the Parks and Nature Special Use Permit Guidelines.

7. Prohibit smoking on Metro parks and natural area properties, with a one year delay in implementation.

This ordinance proposes adding a provision to Title 10 to prohibit smoking on Metro property, with a one year delay in implementation to develop a thoughtful implementation and communication strategy. While smoking is a source of enjoyment for some adults, particularly while participating in outdoor recreation

activities such as camping and fishing, tobacco use negatively affects other visitors and the environment. Secondhand smoke contains more than 7,000 chemicals, including hundreds that are toxic, and no level of exposure is safe.[1] Even brief exposure can be harmful to human health, and especially to children and pregnant women. The impacts are amplified in confined areas like picnic shelters, restrooms and doorways, as well as near children such as at playgrounds.

Further, smoking waste products are the most common items found in litter cleanups and contain numerous pollutants, posing a serious risk to children who might pick them up and fish and wildlife that may ingest them. Discarded cigarette butts pollutes the health of watersheds through chemical contamination. Cigarettes and other smoking materials present a serious fire risk to forests, parks and natural areas. Last year a carelessly tossed cigarette started a fire that burned 13 acres of Metro's North Logan Natural Area.

The proposed smoking provision would apply to all forms of smoking, including cigarettes, cigars, vaping devices, e-cigarettes, and marijuana. The proposed smoke-free policy is consistent with a 2011 Metro Council resolution that established the agency's tobacco-free grounds policy. The policy acknowledges that smoke-free parks and recreational facilities "will further Metro's mission of environmental stewardship and promoting livable, sustainable communities, as they help provide healthy, clean, attractive places for people to be physically active and enjoy the outdoors while upholding environmental values and protecting fish and wildlife." [Resolution No. 11-4262]. The proposed policy is also consistent with national trends, as municipalities across the country are increasingly prohibiting smoking in parks. In 2015, all city of Portland sites where Portland Parks and Recreation rules apply became smoke- and tobacco-free, including vaporizers and marijuana. Staff does not recommend a complete tobacco ban (i.e., banning smokeless tobacco) at this time, though that may be considered in the future.

Enforcement of the smoking ban would be challenging and limited, and would rely primarily on voluntary compliance elicited through educational and outreach efforts. Research on the experiences of other park providers in implementing smoking bans makes clear that a well-planned implementation and outreach strategy is key to the success of the policy. Therefore, staff propose a one year delay in implementation of the policy to allow for the development of an implementation plan that would include outreach and education methods, development of signage, and training for enforcement staff.

8. <u>Add a new provision prohibiting improper exposure and sexual activities within the bounds of Metro properties.</u>

This ordinance recommends adding a provision to Title 10 prohibiting people from exposing themselves while in a place visible to another person or engaging in sexual activity. Metro field staff report observing people engaged in this type of activity. This addition to the Metro Code would make it clear these types of activities will not be tolerated at Metro properties and assist in enforcement activities.

9. <u>No substantive changes proposed to provisions regarding illegal camping.</u>

Illegal camping in parks and natural areas has become a nationwide issue, which is reflected in the increase in illegal camping in Metro properties in recent years. This ordinance does not propose changes to the prohibition in Title 10 on camping outside of permitted areas. Metro Parks and Nature has an illegal campsite policy that outlines the procedures for addressing illegal campsites when discovered on Metro property. Title 10 will continue to provide the authority for staff to address these issues as they arise, and

[1]Centers for Disease Control and Prevention secondhand smoke fact sheet, https://www.cdc.gov/tobacco/data_statistics/fact_sheets/secondhand_smoke/general_facts/index.htm

the more detailed policy provides guidelines to ensure Metro does so in a lawful and compassionate manner.

10. Remove specific fee amounts from the Metro Code, and delegate authority to adjust fees to the Chief Operating Officer or designee.

This ordinance recommends simplifying the Title 10 fee provisions, and transferring the authority for setting and adjusting fees from the Metro Council to the Chief Operating Officer or designee. Chapter 10.04 currently includes specific dollar amounts for some fees, but not all Parks and Nature fees. Adjusting the fees currently listed in 10.04 would require an amendment to the Metro Code, which is unnecessarily burdensome and inconsistent with how other Metro departments set and adjust fees.

A comprehensive review of the Parks and Nature fees is currently underway, as well as development of a fee policy and comprehensive fee schedule. As an interim step prior to adjusting specific fees, this ordinance recommends removing the dollar amounts from the Metro Code and delegating authority for setting and adjusting fees to the Chief Operating Officer or designee. The new fee provisions include a 45-day notice procedure to the Metro Council prior to implementation of any fee changes. These technical changes to the Metro Code will facilitate future adjustments to Parks and Nature fees as necessary.

ANALYSIS/INFORMATION

1. **Known Opposition**
   - Some members of the public are strongly opposed to the staff recommendation within this report pertaining to Metro's pet policy. The final report attached as Attachment 1 from the Sounding Board process include meeting notes and a summary that reflects arguments in opposition to the staff recommendation contained herein.

2. **Legal Antecedents**
   - Metro Code Title 10
   - Metro Council Resolution 11-4262: For the Purposes of Directing the COO to Implement a Tobacco-Free Policy

3. **Anticipated Effects**

With the exception of the proposed smoke-free policy, the proposed changes to the Metro Code would be implemented immediately. Most of these provisions reflect how Metro is currently managing the parks and natural areas, so neither staff nor members of the public would experience significant change. Staff recommend a one year delay before implementation of the tobacco-free policy to allow for the development of a thorough implementation plan, including signage, outreach, communication materials and training for enforcement staff.

While the proposed change to the fee provisions to allow the Chief Operating Officer or designee to set and adjust fees would be implemented immediately, a Parks and Nature fee policy is in development that will guides the establishment, review and adjustment of specific fees. That policy will be completed in 2018.

The proposed changes to Title 10 will result in the need for existing internal policies and procedures to be reviewed and updated. These include:
- Parks and Nature fees (*review underway*)
- Special use permit procedures and fees (*review underway*)

- Rule enforcement manual update, including forms (citations, warnings, exclusions, etc.)

4. **Budget Impacts**

No direct budget impacts are anticipated with the proposed changes to Title 10.

It is anticipated that staff time spent responding to issues that were previously ill-defined will be reduced.

RECOMMENDED ACTION

Staff recommends that Council adopt Ordinance No. 18-1419.

ATTACHMENTS

Attachment 1: Sounding Board Final Report (2017)
Attachment 2: *The impacts of dogs on wildlife and water quality: a literature review*, L. Hennings (2016)

Attachment 1 to Staff Report to Ordinance No. 18-1419

Metro Title 10 Review Sounding Board

Final Report

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November 2017

Background

Metro is charged with protecting water quality, fish and wildlife habitat, and creating opportunities to enjoy nature close to home. Title 10 of the Metro Code regulates the use of Metro owned or operated Parks and Nature facilities by members of the public in order to provide protection for wildlife, plants and property, and to protect the safety and enjoyment of any person visiting these facilities.

Several members of the community have expressed a desire to include new uses at Metro parks and natural areas or expand existing uses. With several new nature parks in development and Metro's natural area portfolio continuing to expand, the agency is reviewing Title 10 for potential updates, and revisiting provisions that are of interest to the public and partners

Sounding Board Members and Process

Metro engaged stakeholders through a Sounding Board process to help inform the Title 10 update process. Sylvia Ciborowski, JLA Public Involvement, facilitated the meeting as a neutral third party. JLA documented meeting outcomes and developed meeting summaries.

The Sounding Board was made up of stakeholders that represented diverse interests, including conservation groups, recreational interests, and neighborhood representatives. The group met three times to discuss issues and opportunities related to modifying the uses currently allowed at Metro owed parks and nature facilities.

Metro staff will use Sounding Board input, along with input by other stakeholders such as agency staff and partners, as well as technical information, to make a report to the Metro Council that could include a recommendation on changes to Title 10. Metro Council will make any final decision regarding potential changes to Title 10.

Sounding Board members include:

1. Tony Deis, *Trackers Earth Portland*
2. Jorge Guzman, *Vive Northwest*
3. Mike Houck and Ted Labbe (alternate), *Urban Greenspaces Institute*
4. Arlene Kimura, *Hazelwood Neighborhood Association*
5. Ken McCall and Brian Cook (alternate) , *Oregon Hunters Association*
6. Micah Meskel, *Audubon Society*
7. Jim Thayer, *Oregon Recreational Advisory Council*
8. Philip Wu, *Kaiser Permanente*

Other invited members that were unable to participate in meetings include Greg Wolley (City of Portland and African American Outdoor Association) and Chad Brown (Soul River).
Meetings were facilitated by an external, neutral facilitator and attended by Metro project team members Dan Moeller and Suzanne Piluso, as well as additional Metro staff as needed.

Key Outcomes

Sounding Board members developed a list of priority topics to discuss, and discussed each in turn. For some they came to consensus as to recommendations for how to address the topic within Title 10. For others they had divergent opinions. Key comments for each of the discussion topics are included below.

A full summary of discussion from the three Sounding Board meetings is included as an appendix, along with additional scientific literature and email comments provided by members.

Smoking

Consensus was reached by the group that a smoking ban should be included in Title 10 (except where allowed by a special-use permit). The key concerns regarding smoking are the risk of fire and health impacts of second-hand smoke. Members also recommended increasing signage about smoking and the risk of causing forest fires.

Alcohol Use

Consensus was reached by the group that an alcohol ban should be included in Title 10, except where allowed by a special-use permit. They noted concerns about park visitors who use alcohol irresponsibly and indicated that a prohibition on alcohol would be easier to enforce than a more nuanced policy. They support the current policy of allowing alcohol by special-use permit, especially the use of alcohol for cultural reasons or celebrations.

Use of Drones

Consensus was reached by the group that drones should be prohibited in Title 10, except where allowed by a special-use permit. Some suggested expanding the current prohibition on power-projected model airplanes to include drones. They noted that acceptable allowable uses to use drones could include research, art, nature, agricultural and wildlife management reasons.

Geocaching

Consensus was reached that Title 10 should prohibit geocaching except in applications that support Metro's environmental education goals. The biggest concern about geocaching is that it encourages, participants to go into natural areas that are not meant to be disturbed.

Dogs and Other Domestic Animals

Consensus was not reached by the group. Many opinions and important pieces of information were shared both in favor, and in opposition, to changing Title 10 with regards to dogs on Metro parks and natural area property. Key comments and points of discussion include:

- **Diverse views on managing dogs.** Members had diverse views on whether and to what extent to prohibit dogs in Metro parks and natural areas. Most felt that the current policy is appropriate and appreciate the exceptions it already makes for regional trails and boat ramps. Most were concerned about the negative impact dogs have on wildlife and do not support increased access for dogs. Others felt that this disturbance is not severe enough to warrant a complete prohibition on dogs. One member also noted that a complete dog ban could potentially raise the frequency of off-leash dogs and be even more harmful to wildlife.
- **Discussion on equitable access for dog-owners.** One member noted that it is inequitable to reduce access to Metro properties for the many dog-owners in the Portland metro area, particularly since there are not many large swaths of land where one can walk their dog. Others noted that a map (provided by Metro staff) shows that there are many areas in the region where dogs are allowed.
- **Discussion on social conflicts**. Some members noted that allowing dogs on Metro property might make some people uncomfortable (i.e. children, certain cultural groups). Under-represented groups might perceive dogs as a threat and not feel comfortable if dogs are allowed on Metro property. Some noted that improved signage and education could be used as tools to prevent conflict between property users.

- **Discussion on enforcement of the policy**. Some noted that a complete dog ban is the easiest for Metro to manage with their limited resources. Others supported a more nuanced policy and support additional resources to enforce a policy allowing limited leashed-dog access at select properties. Members generally noted there is not enough enforcement of regulations prohibiting unleashed dogs.
- **Comments about literature studied by Metro.** A member was concerned about the scientific literature that Metro has reviewed in consideration of revisiting the ban on domestic animals, and felt that the studies in the review are outdated and included small sample sizes. The member requests inclusion of an additional scientific document which suggests that leashed dogs have only a marginal impact on wildlife and natural areas*: The ecological impact of humans and dogs on wildlife in protected areas in eastern North America* (attached to this report). This member also requested inclusion of the Statewide Comprehensive Outdoor Recreation Plan Report (SCORP), available at http://www.oregon.gov/oprd/PLANS/Pages/SCORP_overview.aspx. Other members responded by warning against placing too much importance on one individualized study, and instead would like Metro to look at all of the studies' conclusions as a whole.

Hunting

Consensus was not reached by the group regarding changing Title 10's prohibition on hunting. However, there was general agreement that:

- ***further study should be conducted to understand the impacts of hunting on wildlife and people.***
- ***there should be consideration for limited hunting on Chehalem Ridge with restrictions.***

Comments and points of discussion on the topic of hunting included:

- **Hunting on the Chehalem Ridge property**: There was general agreement around having a policy prohibiting hunting with firearms, but ideas were expressed that a special use permit could be considered for bow hunting or other limited hunting on Chehalem Ridge, in recognition of the historic practice of hunting in this area.
- **Hunting as animal management**: Members noted the importance of managing animal populations to prevent overpopulation of certain game, and some expressed support for regulated hunting to appropriately manage animal populations.
- **Hunting concerns:** Concern was expressed about whether hunting would make certain communities feel uncomfortable on properties. There was also concern about toxicity of certain ammunition.
- **Limitations on hunting:** Members discussed that any allowed hunting should be in line with Metro's mission, should focus on the educational component of hunting, and should be regulated by permit. Members discussed the possibility of organized hunts in which experienced hunters are allowed on specific parks to conduct a certain hunting functionality.
- **Loss of hunting lands**: Metro's purchase of numerous small pieces of land has contributed to hunters losing available hunting land in the region. Members also discussed hunter and recreational access to privately owned forest lands.

Unsupervised Children

Members generally felt that the Metro rules as written are sufficient. The key concerns on this topic were protecting the safety of small children, allowing older children to have enough opportunities for play in natural areas, and keeping older children/minors liable for destruction they cause in nature areas.

There is desire to have better signage and communications materials to increase awareness about nature play opportunities and how to stay safe (outside of scope of Title 10).

Demand/desire trails and foraging

Members support updating the Title 10 to specifically prohibit demand trails.
Members support updating Title 10 to allow small-scale personal consumption of forest products, but prohibit commercial harvesting or excessive personal harvesting.
The key concerns on this topic were preventing degradation in areas where people tend to go off trail, but also not discouraging personal foraging practices that help connect people to nature. Members support allowing demand trails and larger-level harvesting under special use permits, as is the current practice.

Rule Enforcement and Safety

Members did not suggest any specific changes to Code language. They did make suggestions about signage, programs and communications materials that could help increase safety and security.
For nearly all topics described above, members expressed concern about the ability to enforce any prohibitions or restrictions. They also discussed a desire for more safety and security in parking areas to prevent vehicle break-ins, as well as engaging neighbors and park users in promoting safety and reporting suspicious activity.

Metro Title 10 Review Sounding Board Final Report

Appendix

Contains:

1. Metro Sounding Board Meeting #1 Summary
2. Metro Sounding Board Meeting #2 Summary
3. Metro Sounding Board Meeting #3 Summary
4. Email comments submitted by Sounding Board members
5. Article submitted by Sounding Board member: Biological Conservation, *The ecological impact of humans and dogs on wildlife in protected areas* (2016)

Metro Title 10 Review Sounding Board - Meeting #1 Summary

Friday, June 16, 2017, 1:00 to 3:00 p.m.
Location: Metro Regional Center, Room 270: 600 NE Grand, Portland, OR

Sounding Board Members Present

Arlene Kimura, *Hazelwood Neighborhood Association*
Jim Thayer, *Oregon Recreational Advisory Council*
Jorge Guzman, *Vive Northwest*
Ken McCall, *Oregon Hunters Association*
Micah Meskel, *Audubon Society*
Mike Houck, *Urban Greenspaces Institute*
Ted Labbe (alternate), *Urban Greenspaces Institute*
Philip Wu, *Kaiser Permanente*
Tony Deis, *Trackers Earth Portland)*

Staff Present
Dan Moeller, *Metro*
Suzanne Piluso, *Metro*
Laura Oppenheimer Odom, *Metro*
Katy Belokonny, *JLA Public Involvement*
Sylvia Ciborowski, *JLA Public Involvement*

Introductions and Agenda Review

Sylvia Ciborowski, JLA Public Involvement, introduced herself and thanked members for attending the meeting. She said that the meeting purpose is to get a better understanding of Metro's role in the region, including Metro's Title 10 Code; review the Sounding Board's purpose, guidelines, expectations, and desired outcomes; as well as to begin identifying issues and opportunities related to recreational uses at Metro-managed parks and natural areas. Sylvia reminded the Sounding Board that they will meet three times in total to get their input on recreational uses.

Members introduced themselves, along with their affiliations, and shared their favorite natural area or park in the region.

Jim Thayer, Oregon Recreational Advisory Council, asked what the full process for the Title 10 review will include beyond the evaluation of this Sounding Board. Dan Moeller, Metro, said that agency staff will review the Sounding Board's findings, in combination with additional public input and scientific information, to create a recommendation and staff report that will be presented to the Metro Council to help them determine if a Title 10 amendment is warranted.

Thayer asked for more information regarding the specific scientific technique and public process that Metro plans to use. Moeller said that the broader public involvement approach has not yet been identified, but that it will likely include members of the public reviewing the Sounding Board's comments. Moeller explained that Metro staff will help determine which available science is most appropriate to help inform Metro's staff recommendation.

Metro Title 10 Presentation

Moeller explained his role at Metro and said that the agency is in the process of reviewing and updating Title 10 of the Metro Code. Moeller explained that Title 10 spells out what people are permitted to do and prohibited from doing in Metro parks and natural areas, as well as how Metro enforces these rules. He thanked participants for their willingness to provide their unique perspectives, and said that he wanted to present the Sounding Board with a broad overview of the system so that members start their committee work with a shared understanding.

Moeller's PowerPoint presentation included the following:

Parks and Nature - An Oregon Story: The common denominator of why Oregonians love the region is nature.

Mission Statement: Voters have asked Metro to act as the steward of over 17,000 acres across the greater Portland region. The Parks and Nature Department's mission is to protect clean water, restore fish and wildlife habitat, and connect people with nature close to home. Metro fulfills this mission by providing a connected network of parks, trails and natural areas. Providing this network requires collaboration with other regional partners to ensure that the agencies not only avoid duplicative efforts, but implement complementing plans.

Role in the Region: Metro fills a niche between urban and rural park providers by focusing on large sites. Metro is unique nationwide because there are very few other urban areas that place such a high emphasis on connecting people with nature. The mission is challenging to implement as it has an inherent tension: protect the landscape and provide opportunities for people to engage with the landscape.

A Quarter Century of Investment: In the early 1990s Metro began implementing the community's vision for a regional park, natural area, and trail system. Two bonds, allowing for substantial land acquisitions, and two levies, allowing for continued operation of these lands, have been approved since 1995 to support Metro in achieving this vision.

Graham Oaks, Newell Creek Canyon, Chehalem Ridge: Many of the sites Metro manages today would have looked substantially different without the agency's ownership.

Volunteer and Education Programs: A key agency goal is to foster education programs, community partnerships and volunteer opportunities. This effort has recently been enhanced with last year's renewed levy.

Historic Cemeteries: Metro manages 14 historic cemeteries that provide places to enjoy nature, as well as burial space.

Regional Trails: Metro plays an important role in planning the broader trail system with regional partners.

Planting New Roots: It is a time of tremendous growth for Metro's system due to the levy that was renewed last year.

Restoration and Maintenance: Metro places a high emphasis on caring for the land and creating healthy habitats from weed control to large restoration projects.

Access to Nature: Metro creates opportunities for people to experience more of the land they've directed the agency to protect, while minimizing the impact on the habitat.

Community Investments: Metro has developed a robust community investment program, distributing a portion of the bond measures to local jurisdictions to help them achieve their innovative, restoration, education, and trail projects.

Parks and Nature System Plan: Metro finished the System Plan last year outlining the agency's mission and role, portfolio of land, operating model and priorities moving forward. The document is intended to guide investments and decision-making, and contains the rules currently under review. Agency priorities outlined in the Plan include:

1. Science will guide Metro's portfolio
2. Ensure full portfolio is knit together into an integrated system
3. Meet needs of color and low-income communities
4. Use diversified businesses to do Metro's work
5. Invest in partnerships that work toward achieving a shared vision of an interconnected regional network
6. Identify stable, long term funding

Moeller assured members that Metro staff is available to them to provide information and answer questions as they contemplate recommending Title 10 changes.

Mike Houck, Urban Greenspaces Institute, said that it is important for Sounding Board members to remember the origin and history of Metro when discussing the agency's future. Houck said that Metro was created originally because local jurisdictions were not actively protecting parks and natural areas. Houck explained that the agency was always envisioned to be a bi-state, regional system, and not duplicate local park provider initiatives.

Sounding Board Purpose and Participation Guidelines

Ciborowski reviewed the Sounding Board Purpose and Participation Guidelines.

Purpose and Role of Sounding Board
The Purpose and Role of The Sounding Board is as follows:

"The Sounding Board will provide input on current and future recreational uses of Metro's parks and natural area properties. The intended outcome of the Sounding Board is to identify issues and opportunities related to expanding the allowed uses at Metro managed properties, and help assess where there is agreement among diverse stakeholders."

Title 10 Review Process
Metro staff will use Sounding Board input, community feedback, and scientific research to develop a report for the Metro Council to use when considering making changes to Title 10.

Sounding Board Protocols
Ciborowski reviewed the Board membership composition, attendance and alternate expectations, and meeting guidelines. Each member is welcome to name an alternate to attend meetings when the primary member cannot attend, and one member may sit at the table to participate in discussion. There will be time during the last meeting to discuss how the group wants their feedback consolidated and packaged to the Metro Council.

She asked members if they agree to operate under the Sounding Board Process and Operating Procedures, as discussed. The Sounding Board members agreed.

Discussion on Recreational Uses

Ciborowski encouraged the group to begin brainstorming all topics, related to recreational uses on Metro land, that members are interested in discussing throughout the three-meeting Sounding Board process.

The recreational uses, or Title 10 issues, group members most want to address include the following:

- Drones
- Geocaching
- Foraging
- Leashed dogs
- Hunting
- Target shooting, firearms, archery
- Trapping
- Bathrooms
- Disc golf
- Open flames (i.e. stoves, camp fires)
- Marijuana use
- Amplification/noise (i.e. instruments)
- Hazard notification
- Fireworks
- Intelligent park/trail design
    - How to accommodate conflicting uses in a way that eliminates the conflict
    - Informal "desire" trails
- Unsupervised kids
- Spillover onto private lands
- Access to equipment (i.e. lifesaving equipment)
    - Notification if injured

- Homeless and safety
- Enforcement
- What's allowed under special use permits? (i.e. precedence setting)
- Access to information about rules
    - Signage
    - Information in multiple languages
    - Audible information
- Role of parks in public health
    - Specifically to the elderly
    - Access for disabled individuals (ADA requirements)
    - Doctor-recommended for cardiovascular patients

Suzanne Piluso, Metro, noted that staff will review the list in more detail after the meeting to identify any items that are outside of Metro's scope or that may not be applicable to this Title 10 review.

Members discussed several of the topics in turn.

Smoking –

Current Condition:

Metro Code: Title 10 is currently silent about smoking. Although the Code does not address smoking, the Metro Council has an adopted resolution about properties being "smoke free."

Discussion: Comments made by members include:

- Smoking does not belong in the forest due to its flammable nature.
    - The public is not good about remaining aware of burn-ban status.
    - People can be careless about where they put their cigarette butts.
- Consider specific messaging including signage about the danger of smoking during burn-ban. The messaging should communicate that smoking is a serious fire issue.
- Allowing smoking is a public health concern (i.e. second hand smoke).
- Members discussed whether a ban should also include medical marijuana or just tobacco? They noted that if the reason for the ban is concern about fires in natural areas, then it will be easier to ban all forms of smoking.
- Several members noted that special use permits should still be allowed if a smoking ban is included in the Code.

Outcome:

Consensus was reached by the group that a smoking ban should be included in Title 10.

Alcohol –

Current Condition:

Metro Code: Title 10 currently prohibits alcohol at Metro facilities. There are some exceptions specifically articulated in the Code (i.e. events).

Discussion: Comments made by members include:

- Use of alcohol should be allowed for cultural reasons. Permit applicants should be permitted to explain these cultural sensitivities in applying for special-use permits regarding alcohol.

    - Evaluation criteria for special-use permit review should reflect this.
    - Moeller said that Metro has a Cultural Resource Specialist currently on staff to help the agency review their current practices
- Keeping alcohol prohibited by the Code helps with enforcement.
- Alcohol needs to be prohibited by Code to help regulate individuals who are using alcohol irresponsibly.
- Metro staff clarified that a special-use permit supersedes language in the Code.

Outcome:
Consensus was reached by the group that an alcohol ban should be included in Title 10, except where allowed by a special-use permit.

Drones –

Current Condition:
The Metro Code does not address drones, but prohibits power-projected model airplanes except in areas designated for those uses.

Discussion: Comments made by members include:
- Suggest simply adding "drones" to the current Code language relating to power-projected model airplanes.
- A question was asked if Metro has to obtain a special-use permit if they wish to seek a Code exemption. Moeller clarified that Metro does not have to seek permits for its actions.
- Members discussed the kinds of drones uses that might be appropriate. Different members said that the following uses may be appropriate in certain situations:
    - Research
    - Art/filming
    - Media
    - Nature management
    - Agriculture (i.e. manage farms)
    - Wildlife (i.e. Forestry animal counts)
- Metro staff noted that Metro has complete discretion when reviewing special-use permits, as there are not set evaluation criteria.
- A member asked if there is a fee to file a special-use permit. Moeller said that there are two fees: an application fee and a use fee.
  Concern was expressed that these fees could make requesting a special-use permit cost prohibitive. Moeller said that Metro has discretion to reduce or waive fees when appropriate, and that there is a sliding scale fee structure for non-profit agencies. The Sounding Board supports this procedure.
- Concern was expressed that banning drones could be difficult to enforce, particularly because it is difficult to Identify the drone operator (i.e. operate from phone).
    - Metro staff noted that park rangers are responsible for enforcement. Metro's objective is "willful compliance" through education. Also, Metro does not control air space above 400 feet; that is FAA regulated
- Signage might be important in helping enforcement

Outcome:

Consensus was reached by the group that drones should be prohibited in Title 10, except where allowed by a special-use permit.

Geocaching

Current Condition:

The Metro Code does not address geocaching, but harming natural and built resources on Metro property is prohibited. Although the Code does not specifically address geocaching, Metro staff developed general guidelines in an attempt to pro-actively manage the growing trend (as outlined in the "Geocaching" information sheet).

Discussion: Comments made by members include:

- Suggest making the Code relevant to all augmented reality applications, to include similar popular activities such as "Pokémon Go" and Pokeball.
- The biggest concern about geocaching occurring on Metro properties is that it encourages, and often requires, participants to go into natural areas that are not meant to be disturbed. This type of activity can disrupt species and goes against the philosophy of the agency.
    - Additionally, geocaching requires participants leave an item behind, which essentially is a form of litter.
- Concern was expressed that enforcing an augmented reality prohibition might be difficult
    - A suggestion was made that park rangers could be responsible for collecting the caches which would discourage people from participating in the activity on Metro property.
- Metro clarified that the agency currently attempts to limit geocaching activities by communicating with geocaching.com and requesting that they remove from their website any geocaches located on Metro property.
    - Members questioned how much Metro staff time is being spent on geocaching enforcement.
- There was a question about if there is value in allowing augmented reality activities to occur on Metro properties to help achieve Metro's environmental educational goals.
    - The activity itself is encouraging community members to interact with nature – which is a priority of the agency.
        - There may be value in encouraging augmented reality activities in specific uses through an agency managed program to avoid habitat degradation (i.e. requiring staying on trails, etc.).
        - The messaging would have to be very intentional – consider using a term other than "geocaching" – so that people understand the activity is only allowed through an organized program.

Outcome:

Consensus was reached that Title 10 should prohibit geocaching except in applications that support Metro's environmental education goals.

Hunting

Ken McCall, Oregon Hunters Association, said that Brian Cook will be the alternate attending the July meeting in his place. Due to his absence at the next meeting, McCall said that he would like to start the group conversation regarding hunting on Metro property so that he is able to brief Cook prior to his attendance.

Discussion: Comments made by members include:

- McCall said that Metro's purchase of numerous small pieces of land has contributed to hunters losing adequate available hunting land statewide. The Oregon Hunting Association agrees that hunting should not be a recreational use allowed on Metro's small areas of land, but they see an opportunity for hunting to have an appropriate role on carefully-selected Metro spaces. Questions arose from the group regarding how hunting could play an "appropriate role". McCall explained that some ideas include having educational hunting components and organized hunts in which experienced hunters are allowed on specific parks to conduct a certain hunting functionality (i.e. specific weapon). The Oregon Hunting Association has concern about how private land owners adjacent to Metro land are being negatively affected by animals intruding on their properties. McCall added that a hunting policy change could help manage some animal concerns, especially regarding elk and deer.
- A member added that a piece of property can have a certain animal carrying capacity; and gave an example of ways that other countries regulate, and partner, with hunters to manage this problem.
- A member asked whether hunting was previously allowed at Chehalem Ridge. Moeller confirmed that it was. McCall clarified that the Oregon Hunters Association request is more wide-spread to include consideration at several Metro properties, not just at Chehalem Ridge.

There was agreement among members that hunting would be addressed at the next meeting.

Next Steps

The next meeting is scheduled for Tuesday, July 18, 2017 from 9:00 – 11:00 a.m. Metro staff will sort through the group's recreational uses brainstorming list, prior to the next meeting, to identify which items are relevant to Title 10 and should be discussed further by the Sounding Board. The third, and final meeting, will likely be held in September.

Closing

Moeller thanked the group for their thoughtful participation and said that the robust dialogue has already been tremendously helpful to Metro staff. Sounding Board members agreed that they thoroughly enjoyed the conversation. Thayer thanked Metro staff for allowing input on Title 10 and designing a meaningful engagement process by which to do so.

Metro Title 10 Review Sounding Board - Meeting #2 Summary

Tuesday, July 18, 2017, 9:00 to 11:00 a.m.
Location: Metro Regional Center, Room 370a: 600 NE Grand, Portland, OR

Sounding Board Members Present

Arlene Kimura, *Hazelwood Neighborhood Association*
Jim Thayer, *Oregon Recreational Advisory Council*
Jorge Guzman, *Vive Northwest*
Brian Cook (alternate), *Oregon Hunters Association*
Micah Meskel, *Audubon Society*
Ted Labbe (alternate), *Urban Greenspaces Institute*
Philip Wu, *Kaiser Permanente*
Tony Deis, *Trackers Earth Portland*

Staff Present
Dan Moeller, *Metro*
Suzanne Piluso, *Metro*
Lori Hennings, *Metro*
Laura Oppenheimer Odom, *Metro*
Katy Belokonny, *JLA Public Involvement*
Sylvia Ciborowski, *JLA Public Involvement*

Introductions and Agenda Review

Sylvia Ciborowski, JLA Public Involvement, welcomed members and thanked them for having such a thoughtful discussion last month. Ciborowski reviewed the meeting #1 summary and the morning's meeting purpose. She said that the meeting is intended to be a continuation from last month and that the focus would be on hearing a scientific review given by Lori Hennings, Metro Wildlife Scientist, and discussing how Metro's Title 10 Code should address leashed dogs and hunting. Ciborowski reminded members of the Sounding Board's overarching purpose: "…to identify issues and opportunities related to expanding the allowed uses at Metro managed properties…" and referred to a table, included in the meeting packet, that sorted topics of interest and indicates how they will be addressed in this process. She said that members can directly contact Metro staff if they have information to communicate regarding one of the topics that does not fall under the purview of what the Sounding Board will be evaluating.

All in attendance introduced themselves.

Recreational Uses in Natural Areas Presentation

Lori Hennings, Metro, said that her role for the agency is to review literature and convene groups to explore various topics related to Wildlife Science. Hennings said that some of her work includes the exploration of Recreation Ecology, which is the study of ecological effects due to recreational uses. Hennings said that more than a year ago she did literature review research regarding recreation ecology to help inform Metro's access planning process. Hennings provided a summary of the relevant findings to the Sounding Board regarding the impacts of certain recreational activities on natural areas, as follows:

General Recreation Ecology:

- Horses have the greatest impact on trails, compared to mountain bikers and hikers. The bikers and hikers have a similar effect on trails.
- Horses are the least impactful to disturbing wildlife. Hikers tend to have a much bigger effect, likely due to the sheer quantity of them.
- Any recreational use is likely to have some negative affect on wildlife.
- People do not generally understand that they are having an effect on the environment and wildlife.
- Some animals are more sensitive to human disturbances including migratory birds, migratory mammals, animals that are pregnant, animals that have babies with them, and birds that spend time near the ground.
- It is helpful to study flight initiation distance (i.e. how far away an animal/person is before a bird flies away) when determining impacts of recreational uses.

Analysis of Dogs:

- There is an additive effect of disturbance caused by dogs; wildlife are more disturbed by people with dogs than by people without dogs.
- The disturbance is likely due to dogs being viewed (scent and appearance) as predators by wildlife.
- Dogs that are off-leash are even more impactful to the natural environment as their "markings" act as a wildlife repellant.
- Another potential impact of dogs being in a natural environment is disease. Dog and wildlife bacteria are different and some diseases can be passed to dogs that can be brought back to the pet owner.
- Water quality monitoring shows that E.coli is a concern when dogs are present. Water quality can be compromised from the introduction of dog feces.

A question was asked about if water quality monitoring can differentiate between coyote and dog fecal matter. Hennings said she did not know.

Discussion

Dogs –

Current Condition:

Metro Code: Title 10 currently prohibits dogs, and other domestic animals, on Metro property. Exceptions are made for service animals, pets on-leash at boat ramps, and pets on-leash at regional trails.

Discussion:

Comments relating to research:

- Discussion occurred around the dog and natural habitat literature that Hennings presented, as well as an article that Jim Thayer, Oregon Recreational Advisory Council, circulated to the Board. Comments included:
    - The dated nature of the references used in Hennings' study, as well as the sample size, is concerning.
        - Research technology has changed substantially since the studies referenced in Hennings' research were conducted. Hennings agreed that there are sample size limitations, specifically relating to the on-trail data that was part of her literature.
    - The Board should avoid placing too much importance on one individualized study, and instead look at all studies' conclusions as a whole.

Comments relating to dog management:

- Dog management reduces impacts on natural environments significantly because having a complete dog ban raises the frequency of off-leash dogs which is harmful to wildlife.
- A recommendation was made to change the policy to allow leashed dogs on Metro property.
- Prohibiting dogs completely is also a valid approach to dog management.
- The degree of management (i.e. dogs being leashed or not leashed) does not make a difference on the level of disturbance to wildlife and the natural areas.
- Hennings clarified that wildlife disturbance is caused from a constant stream of dogs, not from introducing an occasional dog.
- Some members like the current policy and appreciate the exceptions it already makes for regional trails and boat ramps.
- A policy change is not appropriate due to the negative impact dogs have on wildlife.
- Metro staff need to communicate to the public the rationale for a dog ban to try to ensure this policy does not impact the public's willingness to support the regional greenspaces or create reluctance to use them.
- A policy exception should be considered for Metro's urban properties.

Comments relating to social conflicts (between dogs and people):

- Concern was expressed about social conflicts between dogs and people without dogs.
- Research should be conducted regarding whether a leashed, versus non-leashed, dog affects that social conflict outcome.
- There needs to be an educational component about appropriate dog-owner etiquette if there is a policy change.
- Having dogs on Metro property might make some people uncomfortable (i.e. children, certain cultural groups).

- It is interesting that Metro is currently evaluating how to better serve under-represented groups (specifically immigrants) at the same time they are contemplating allowing guns and dogs on their properties.
- Under-represented groups might perceive dogs as a threat and not feel comfortable if dogs are allowed on Metro property.
- The geography of Metro's properties, being more destination-based as opposed to easily-accessible city parks, does not lend itself to people naturally wanting to bring their pets.

Comments relating to the policy and Metro's mission:

- A change in policy should be dictated by the degree to which Metro's mission (protect water quality, preserve wildlife and provide human access) is being met.
- A question was asked about if all three of Metro's mission priorities are equally weighted. Dan Moeller, Metro, answered that there is not an official weighting, but that Metro staff evaluates ecological implications, followed by the compatibility of human access with conservation goals.
- The three Metro mission priorities conflict with each other in this case and there are priority tradeoffs between allowing or banning dogs.
- Creating the best policy is somewhat subjective, but a recommendation was made to leave the dog policy in its current form.
- Another member expressed agreement with the current code when considering both Metro's mission and the research presented.
- The Audubon land has a "no dog" policy and the organization has used it as an educational opportunity to teach the public about how dogs negatively affect the natural environment.
- Additional signage might be a tool Metro can use to achieve an educational component similar to The Audubon Society.
- A question was asked about if the current policy was in place because it was easiest to enforce a zero tolerance policy or because it was the policy that had the most merit. Moeller said that he does not know the intent and nuances behind the policy's origin.

Comments relating to the equity of access to natural areas for dog owners:

- Public health should also be a Metro priority. One of the biggest ways to get people outside and moving is to allow the 62 percent of Portland residents who own dogs to bring them onto Metro property.
- A complete dog ban is extreme and an equity issue. Metro property is funded by public tax dollars, and since the majority of those funds come from dog owners, their needs should be met with a less limiting policy.
- Equity for dog-owners is not an issue, as represented by the map showing that there are many areas in the region where dogs are allowed.
- Options are very limited in the Portland Metro area for people to spend time outdoors with their dogs because Weyerhaeuser has purchased much of the land adjacent to the Willamette Valley and the small urban parks do not provide trails and open green spaces wanted by most dog owners.
- The goal should be to manage the presence of dogs through signage and education to prevent conflict between property users.

Concerns relating to enforcement of the policy:

- An enforcement process should be created before a policy modification occurs to allow pets.
- An exception to the policy should be explored to allow dogs on Metro's rural property.

- A complete dog ban, as currently reflected in the policy, is the easiest for Metro to manage with their limited resources.
- There was acknowledgement by several members that ideally the policy would have compromise and meet all needs, but that Metro does not have the ability and resources to enforce a nuanced policy.
- Policies should not be created that cannot be enforced.
- A complete dog ban is the easiest to enforce, but that does not mean it is the best policy in regards to creating properties that can be enjoyed by Metro tax payers.
- Additional resources should be allotted to enforce the leashing requirement of a new policy.

Comments relating to the use of dogs for personal protection:

- The policy should be changed to allow leashed dogs because dogs provide protection for individuals.
- Dogs will not be harmful to wildlife once they (wildlife) are given an opportunity to adapt to their new environment.

Outcome:

Consensus was not reached by the group. Many strong opinions and important pieces of information were shared both in favor, and in opposition, to a Title 10 code change in regards to dogs on Metro property.

Hunting –

Current Condition:

Metro Code: Title 10 currently bans hunting in Metro parks and natural areas. To date, no exemptions to the policy have been made.

Moeller added that it is not Metro, but the state that is responsible for the regulation, and enforcement, of firearms. A member asked for clarification about Metro signs that depict weapons being prohibited on Metro property. Moeller said that the sign illustration is intended to show hunting, not firearms, being prohibited.

Discussion:

Comments relating to allowing hunting on Chehalem Ridge property:

- There was acknowledgement by members that Chehalem Ridge historically allowed hunting and that the hunting ban has changed how people use that property and the culture of the space.
- Hunting should not be allowed, in general, on the basis of incompatibility with Metro's mission. An exception could be made through a special use permit for certain outlying areas (i.e. Chehalem Ridge) for specific types of hunting.
- Some restricted hunting should be considered if it still allows Metro to achieve its mission.
- Many minorities rely on hunting to feed their families and although hunting should remain banned on most Metro property, a policy exception on Chehalem Ridge should be considered.
- There was general agreement around having a policy prohibiting hunting with firearms, but ideas were expressed that a special use permit could be considered for bow hunting on Chehalem Ridge.

Comments relating to use of hunting as animal management:

- The policy should allow for hunting in situations where game has overpopulated a certain area.
- Hunting could also help secure safe passage on logging roads that beavers damage.
- Hunting could be allowed by the policy in a way that prioritizes safety, regulates firearm type (i.e. bows, short-range guns), and is done to appropriately manage animal populations.
- Animal management is a necessity to keep Metro and adjacent properties healthy.
- Discussion occurred about if, and why, wildlife is expected to become over-populated in the near future on Metro properties. There was acknowledgment that some increase in animal populations can be attributed to Metro's thinning project.

Comments relating to concerns of hunting on Metro properties:

- Allowing hunting on Metro property will likely cause some communities to not feel comfortable in the space.
    - This could be managed by making certain areas off-limits to the general public during a limited-duration of allowable hunting because hunting season is not the same as prime hiking season.
    - A proposal was made to change the policy in a way that would allow a very limited number of hunters, sponsored by the Oregon Hunters Association, to participate in controlled hunting that makes all park participants feel welcome.
    - The demographic breakdown of the current Oregon Hunters Association membership illustrates that hunting in this region is an inclusive activity.
- Hennings said that in addition to the general disturbance to wildlife, hunting could trigger the predator/shelter effect (i.e. pushing deer and elk onto adjacent sites that do not allow hunting).

Comments relating to regulation of hunting on Metro properties:

- If some hunting was allowed on Metro property, it would take a lot of time before implementation because of the substantial oversight and regulation by other entities.
- Toxicity of the ammunition (non-lead as opposed to lead) should be regulated if hunting is allowed.
- The following two requirements should be written into any hunting policy allowances:
    - A subsistence versus trophy hunting requirement.
        - It was suggested that this could be achieved by issuing permits allowing one deer per hunter.
    - A master-hunter training certificate; made economically accessible.
- There needs to be strong emphasis on an educational component if hunting is allowed.
- Before making a policy change, Metro staff should gather demographic data about who would hunt in these areas, as well as research how hunting would affect the health of the park, wildlife and adjacent properties.

Outcome:

Consensus was not reached by the group regarding a hunting Title 10 code change. However, there was general agreement that:

- ***further study should be conducted to understand the impacts of hunting on wildlife and people.***
- ***there should be consideration for limited hunting on Chehalem Ridge with restrictions.***

Prioritization of Discussion Topics

Ciborowski read the list of topics originally identified by the Sounding Board and said that it is unlikely they can all be covered in the remaining meeting. The members agreed that the following topics are the most important to cover at their next, and final, gathering:

- Unsupervised children
- Rule enforcement and safety
- Demand/desire trails
- Foraging and gleaning

Ciborowski suggested that members submit comments to Metro staff regarding the topics that will not be discussed by the Board due to time constraints. Board members agreed.

Closing

Suzanne Piluso, Metro, thanked members for another productive meeting and said that she is going to send out a doodle poll to facilitate scheduling the September meeting.

The meeting adjourned shortly before 11:00 a.m.

Metro Title 10 Review Sounding Board - Meeting #3 Summary

Wednesday, September 20, 2017, 9:00–11:00 a.m.
Location: Metro Regional Center, Room 270, 600 NE Grand Ave., Portland, OR

Sounding Board Members Present
Tony Deis, *Trackers Earth Portland*
Arlene Kimura, *Hazelwood Neighborhood Association*
Ted Labbe (alternate), *Urban Greenspaces Institute*
Ken McCall, *Oregon Hunters Association*
Micah Meskel, *Audubon Society*
Jim Thayer, *Oregon Recreational Advisory Council*
Philip Wu, *Kaiser Permanente*

Staff Present
Dan Moeller, *Metro*
Suzanne Piluso, *Metro*
Sylvia Ciborowski, *JLA Public Involvement*
John Todoroff, *JLA Public Involvement*

Introductions and Agenda Review

Sylvia Ciborowski, JLA Public Involvement, welcomed Sounding Board members and provided a recap of the previous Sounding Board meeting on July 18, 2017. She noted that topics for discussion at today's meeting include four key topic areas that were identified as most important at the meeting in July: unsupervised children, rule enforcement and safety, demand trails, and foraging.

Sounding Board members introduced themselves.

Sylvia and the group reviewed the Meeting #2 summary. One member requested that the meeting summary include letters and other written comments. Sylvia noted that the final report will include any letters, comments, and studies that members want to submit.

Members provided additional comments on the two topics discussed at Meeting #2: access by leashed dogs and hunting. Comments included:

- Members noted the difficulty of public access on large swaths of private lands. There may be a role for Metro to negotiate public access on privately owned forest lands (e.g. Weyerhaeuser property), although this issue might not necessarily be addressable under Title 10. Recreational pressure on public lands near Portland could be relieved by opening up private lands for recreation. Currently there is a high demand to obtain scarce and expensive permits to access private land. Dan Moeller, Metro, noted that there is an opportunity for further discussion on this issue.

- The Oregon Department of Fish and Wildlife's Access and Habitat Program Board is an appropriate venue for discussing the issue of hunter access to privately owned forest lands. There are other landowners besides Weyerhaeuser who are also expected to enact programs that will restrict recreational access.
- There is concern from one member about the scientific research presented by Metro at the last meeting. The member noted it relies on dated research, small sample sizes and anecdotal evidence. He described a separate, more robust and more recent study suggests that humans, more than dogs, are the main impact on wildlife and leashed dogs only have a marginal impact.
- There is not enough enforcement of policies prohibiting unleashed dogs at other sites that allow dogs. Another member suggested placing signs notifying visitors of the dollar amounts of fines for violating leash policy.
- The Statewide Comprehensive Outdoor Recreation Plan Report (SCORP) shows there is a huge demand for more land for dog walking, and this should be a high priority for Multnomah and Washington counties.

Discussion

Unsupervised children

Current Condition:

Current rules do not address children (with the exception of banning children under 5 from swimming in Blue Lake).

Discussion:

Comments made by group members include:

- Parents' responsibility for children and teen's behavior can be a gray area. There should be clarification about what age group we are discussing. Using the word "minors" (which includes teenagers) has a somewhat different implication than "children", in terms of safety and accountability. The concern with young children is the safety of the child in natural areas and particularly around open water; whereas the concern with minors/older children is accountability for reckless actions.
- Parents are often uncertain about how much autonomy children can have or are allowed to have in the forest. Independent recreation is important for children's development. Rules should not discourage parents from allowing that. Parks and forests are important venues for children to develop their imaginations.
- Children should be allowed to play unsupervised when liability is not an issue. Dan Moeller clarified that liability is not an issue for Metro at Oxbow (and other natural areas), even though there are occasional deaths in swimming holes there.
- Children today have relatively little access to the "sacred space" of natural areas, and relatively little opportunities to play with freedom from parents, compared to the past.
- There is need for nature play areas in Metro parks — semi-structured play areas where parents will feel comfortable bringing their children.

- Metro should increase awareness among parents, many of whom do not understand the rules or what is permitted, or mistakenly believe that children are not allowed to play alone in natural areas.
- Suggest creating a version of safety rules and fire prevention tips that is written to be age-appropriate, fun and accessible for a young audience. This kind of informational material would have the added benefit of being accessible to audiences that do not speak English as their primary language.
- There need to be clear warnings about swimming and/or fishing in waters that have contamination problems (e.g. bacteria). A good example is the dock signage at Sauvie Island.

Outcome:
Members generally felt that the Metro rules as written are sufficient. There is some desire to have better signage and communications materials to increase awareness about nature play opportunities and how to stay safe (outside of scope of Title 10).

Demand/desire trails and foraging

Current Condition:

Suzanne explained that current rules prohibit creation or alteration of trails and prohibit foraging without a permit. However, enforcement is an issue, and enforcement of mushroom harvesting does not happen at all in practice.

Discussion:

- Demand/desire trails:
    - Agreement among the group that explicit prohibition of demand trails should be added to the code so that regulations can be printed on signs and enforced. They noted that demand trails should particularly be prohibited around single track biking trails—where demand trails are more of an issue. They would still like demand trails to be allowed under special use permits.
    - There is pressure to build trails, so Metro needs to be proactive about adding explicit prohibition in the code.
    - Forest Park deals with demand trails well.
- Foraging:
    - The rules should recognize the distinction between small-scale foraging for personal consumption versus larger-scale commercial harvesting, or between foraging for on-site consumption versus removal from the park or natural area. Commercial versus non-commercial foraging is the most important distinction.
    - Some harvesters forage a large amount for their own personal consumption.
    - Regulations should not prohibit small-scale personal foraging, since that can discourage families from using natural areas.
    - There is general agreement that small personal consumption should be allowed but large scale commercial operations (or large-scale personal foraging) should be prohibited.
    - Consider cultural values and traditions pertaining to foraging.

- It is unlikely that there is currently a significant amount of large-scale commercial activity occurring on Metro land, however, consider unanticipated future uses as Metro acquires more land.
- There is current regulation prohibiting disturbing plants and soil, therefore illicit cultivation of agricultural products (e.g. cannabis) is already prohibited.

Outcome:

- ***Members support updating the Code to specifically prohibit demand trails.***
- ***Members support updating the Code to allow small-scale personal consumption of forest products, but prohibit commercial harvesting or excessive personal harvesting.***
- ***Both demand trails and larger-level harvesting should be allowed under special use permits, as is the current practice.***

Rule enforcement and safety

Current Condition:

Current code states that Metro has the authority to enforce rules, revoke permits, and cite or exclude people. There is an internal manual for rangers guiding how they implement enforcement policies. There are only 14 rangers employed on Metro land, so adequate enforcement is an issue.

Discussion:

Comments from members include:

- Security in parking lots is a concern, especially break-ins and theft. Consider adding warning signage, or providing a contact number for rangers on signs in parking lots and on trails.
- Suggest providing rule documentation and outreach that is accessible to people (adults and kids), written in an entertaining and engaging way. “Kid-friendly” rule guides would also benefit communities (e.g. immigrants and refugees) with low education and/or low English comprehension. Signage and guides should be made accessible with illustrations and simple language.
- Engage park neighbors about problems and provide information about how to report suspicious activity. Be careful to avoid problems associated with NextDoor social media, such as prejudiced response toward minorities.
- Good enforcement is necessary to prevent vigilantism. Members suggested that Metro engage with neighbors and self-organized groups to train them in proper methods of neighborhood watch type activities and avoid the problems associated with vigilantism, for example uncompassionate response to homelessness.

Outcome:

- ***Members did not suggest any specific changes to Code language. They did make suggestions about signage, programs and communications materials that could help increase safety and security.***

Project wrap-up discussion

Sylvia asked Sounding Board members to reflect on what they feel is the most important issue or key takeaway regarding recreational uses on Metro-owned properties.

- It is important to involve and communicate with non-English speakers and illiterate people, and to build trust in Metro among immigrant and disadvantaged communities. Cultural relevance is important. One way to communicate with non-English speakers and the wider populations is through use of symbols on signs—rather than words.
- The discussion of cultural issues has been eye opening, and the Oregon Hunting Association intends to engage the hunting community to try to be more inclusive. The Association would support allowing some hunting on properties (with a permit)
- The current rules are well written and flexible, and this conversation is more about refining them and making them more adaptable. Appreciate Metro's adaptability.
- Hope that Metro infuses some flexibility and creativity in the update of Title 10 and management of parks and natural areas. Avoid total prohibitions, and aim for more flexible and responsive ways to deal with problems.
- Metro's Equity Strategy is an important lens for considering updates to regulations.
- Metro's mission is foundational and should be the underpinning for any regulation updates.
- Develop a way to be flexible within the context of Metro's large portfolio of public lands.
- Suggest producing a condensed summary of the outcome of this project and changes to the Code as an example and guide for other parks agencies in the area. There was also a suggestion to present at the Oregon Recreation & Park Association annual conference, reaching out to other communities to share what has been learned in this process.

Final Report and Next Steps

Dan thanked the group for their contributions and for their collaboration on these issues. He said that the time spent here has been very valuable and productive.

Next steps:
JLA will produce a summary report of the process by mid-October, which will be sent to the group for review by the end of the month. In October and November Metro staff will review issues brought up in these discussions. Staff will produce a report (including meeting summaries) to present to Metro Council in the first quarter of 2018.

Sounding Board members should send any further comments, letters, or other information to Suzanne Piluso (Suzanne.piluso@oregonmetro.gov), ideally within the next two to three weeks.

Ted suggested continuing the discussion about negotiating with Weyerhaeuser or other private land owners regarding allowing public uses. He will organize this discussion by email.

The meeting was adjourned.

Appendix: Email Comments Submitted by Metro Title 10 Review Sounding Board Members

From: Mike Houck [mailto:mikehouck@urbangreenspaces.org]
Sent: Thursday, June 15, 2017 2:28 PM
To: Dan Moeller
Subject: UGI DRAFT Position on Title 10 Recreational Use of Metro Natural Areas

The following are my reactions to the topics for conversation

As per the 1992 Metropolitan Greenspaces Master Plan and Systems Management Plan, any uses must respond to the first priority of ecological integrity of Metro's natural areas.

I have issues with page 10.01-3 definition of Park in the context of Metro's program and will bring that up ("playground, recreation center,)

page 10.01-5 I think the angling statement is inconsistent with the discussion piece on angling

ALCOHOL: I think it best to not allow alcohol with a special permit,which should help with enforcement. We all know people will bring a bottle of wine/beer and that's not really a problem. If you legalize alcohol then enforcement will be a nightmare

DOGS: No dogs off or on leash!

DRONES: No drones unless for a Metro research, restoration, management purposes. Must be on contract with Metro to use a drone.

GROCHACHING/LETTER BOXING: Yes, but only as per adopted Metro policies. I think this is highly problematic and want to discuss further with Metro staff

FISHING: In designated areas; No dogs allowed; No alcohol allowed

HUNTING: No way, no how!

SMOKING: Prohibit

Mike Houck, Director
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www.urbangreenspaces.org

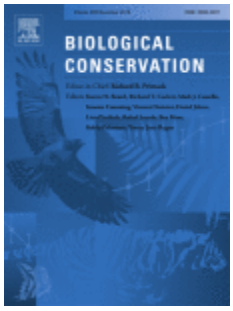
Endless Pressure, Endlessly Applied
In Livable Cities is Preservation of the Wild

From: Jim Thayer [mailto:Jim@thayers.org]
Sent: Thursday, July 13, 2017 1:34 PM
To: Suzanne Piluso
Cc: Lori Hennings; Dan Moeller; Laura Odom; Sylvia Ciborowski
Subject: Re: Materials for Metro Code Title 10 Sounding Board mtg #2 (July 18)
Importance: High

Suzanne
At the onset of this process I expressed misgivings about the nature of the scientific information that would be presented to this group. Much as I respect Lori Henning's work, her literature review reflects Metro's historic perspective and it does not include information that I purposely provided to Metro that reflects more recent findings. A brief review of the materials cited in Lori's summary reveals that much of the material is 5-10 years old. More recent studies, such as the study cited below, have found that dogs, people and wildlife can cohabitant natural areas with much less disturbance that the older literature suggests. Moreover the studies do not reflect upon the issues of equity that wholesale banning of dogs has on the population of Portland, which has clearly expressed a need for more dog walking facilities with 97% of the Metro population expressing this need (SCORP 2017). Banning dogs from all of Metro's park establishes an equity conflict since it uses public tax monies to benefit less than half of the population, not as a result of a casual exclusion, but by imposing a purposeful inequity.

Since my prior efforts to ensure the distribution of a broader scope of research on this subject into the agenda were ignored, I herewith re-submit the following 2016 study that involved a much larger sample size than the earlier studies that Lori reviewed. This 2016 study involved 52,863 detections of native wildlife, 162,418 detections of humans and 23,332 detections of dogs over 42,874 camera nights.

Our results indicate that humans are perceived as a greater risk than coyotes, and this increases when dogs accompany their owners. The concentration of dogs on the trail with their owners, and relatively minor behavioral impacts on prey, contrasts the strong negative ecological effects found in studies of free-ranging dogs. We found dog management to be effective: prohibiting dogs in protected areas reduced their use of an area by a factor of 10 and leash laws increased leashing rates by 21%.



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The ecological impact of humans and dogs on wildlife in protected areas in eastern North America

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Highlights

- Citizen-scientists helped conduct a camera-trap survey in U.S. protected areas.
- Dogs were common in protected areas and most were leashed.
- Most of dogs were on the trail (99%) and/or accompanied by a human (97%).
- Leash laws reduce the incidence of free-ranging dogs.
- Wildlife perceived free-ranging dogs as a relatively low threat.

Abstract

The establishment of protected areas is a key strategy for preserving biodiversity. However, human use of protected areas can cause disturbance to wildlife, especially in areas that allow hunting and if humans are accompanied by dogs (*Canis familiaris*). We used citizen-science run camera traps to investigate how humans, dogs and coyotes (*Canis latrans*) used 33 protected areas and analyzed behavioral responses by three prey species: white-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*) and northern raccoon (*Procyon lotor*). We obtained 52,863 detections of native wildlife, 162,418 detections of humans and 23,332 detections of dogs over 42,874 camera nights. Most dogs (99%) were on the trail, and 89% of off-trail dogs were accompanied by humans. Prey avoided dogs, humans and coyotes temporally, but did not avoid them spatially, or greatly increase vigilance. Our results indicate that humans are perceived as a greater risk than coyotes, and this increases when dogs accompany their owners. The concentration of dogs on the trail with their owners, and relatively minor behavioral impacts on prey, contrasts the strong negative ecological effects found in studies of free-ranging dogs. We found dog management to be effective: prohibiting dogs in protected areas reduced their use of an area by a factor of 10 and leash laws increased leashing rates by 21%. Although millions of dogs use natural areas in North America each year, regulations enacted by protected areas combined with responsible management of dog behavior greatly reduce the ecological impact of man's best friend.

http://www.sciencedirect.com/science/article/pii/S0006320716303603

On 24-Sep-2017, at 7:34 PM, Jim@thayers.org <jim@thayers.org> wrote:

As a member of the Portland area hiking community, I am encouraged that Metro is examining some of its foundational precepts. Nonetheless, as a member of the aforementioned sounding board I feel compelled to question the validity of the "soundings" because the process was marred by:

* reliance on decades-old scientific data,
* a complete omission of relevant state hiking data, and
* a reluctance to address equity costs born by Metro area dog owners

To address these shortcomings individually please consider the scientific data we were presented:

* 75% of the studies referenced in Metro's fvscience literature overview were more than 17 years old.
* Many of the cases were anecdotal, had small sampling sizes, or were geographically disassociated.
* a 2016 study published by the Journal of Biological Conservation differed sharply from these older surveys because of its huge sampling size and the introduction of new camera and monitoring technology.
* the study found that "humans were perceived as the highest perceived risk for wildlife."
* "Dogs by themselves had the lowest perceived risk."
* When dogs and people walked together there was a marginally greater impact on wildlife. Should we exclude the dogs? Why not the humans?
* This recent study also concluded that "prey species adjusted their disturbance response to dogs ...to reflect the relatively low risk posed by an on-trail dog walking with its owner."
* Finally, this study showed "how the responsible control of dog behavior by their owners can minimize disturbance of wildlife." This is what we should be focusing on, instead of dividing our community with inequitable exclusions.

When I introduced the recent study (published by the Journal of Biological Conservation) its findings were rebuffed simply because it determined that a human accompanied by a dog was slightly more threatening than a lone hiker. Logically we should remove the more disturbing critter - the human. Remember, dogs have the lowest perceived risk by wildlife and humans have the highest perceived risk. Poor outdated data does Metro a disservice and undermines its credibility.

The sounding board process was silent on the social costs that arise when the "customary and usual rights" of traditional users are abridged. As citizens of Metro jurisdiction we have twice paid for the purchase and maintenance of these lands, but now half of us will be banned, because we prefer to walk with our dogs. Since when has dog ownership disqualified us from enjoying public investments like trails and parks?

In fact, 49% of the residents of the Metro region have explicitly asked (SCORP) for more trails to exercise their dogs. Instead we're closing off more areas for dogs? Dogs are the second biggest reason people choose to recreate in nature. It's my dog that keeps me active and healthy, but

Metro doesn't appear to value this public health benefit.
A blanket exclusion of dogs is socially inequitable, and will remain a recurring complaint as open spaces disappear and timber companies lock us out of the forests. We can't simply wish this issue away and as our more dog owners are locked out Metro will have to continue to defend the indefensible.

My gratitude to Metro and my fellow observers. In all good conscience I could not support policies that shut half of us out of the woods, nor could I refrain from objectIng to those equity concerns that the "Sounding" appears to have been overlooked in their search for guidance on future park access issues.

Jim Thayer

Sent from my iPad
A

On Sep 24, 2017, at 20:14, Mike Houck <mikehouck@urbangreenspaces.org> wrote:

Jim
Out of curiosity is your consistent take on the dog issue the only portion of the review you take issue with? We're there other issues you take exception to?

Not to "rebut", honoring your right to dissent, but if I read your comments correctly you are claiming half the Metro population is being excluded from Metro properties based on their ownership of a dog(s).

That argument makes no sense to me. I know many dog owners who quite happily support Metro's existing policy based on wildlife disturbance...and frankly negative impacts on other natural area users.

Finally, when Metro issued their two acquisition bonds they stressed water quality, wildlife habitat and, where appropriate, human enjoyment of access to nature. I was involved intimately in both bond measures and there was never a mention of dogs.

Houck

<sm rev UGI logo.jpeg>

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Endless Pressure, Endlessly Applied

In Livable Cities is Preservation of the Wild

From: ken mccall
To: Dan Moeller; Suzanne Piluso; Bryan Cook
Subject: Metro Title 10 Review Sounding Board
Date: Wednesday, September 27, 2017 10:13:19 AM

Hi Dan and Suzanne,

We wish to extend our thanks for the willingness of Metro to pull together the sounding board group and including OHA in the process. We learned a lot and met some great people representing the respective interests of the public.

I wanted to repeat for the record OHA is seeking only consideration for limited, controlled hunting as a traditional public use on large Metro holdings. The loss of hunting on Chehalem ridge is the current example though as Metro expands further into less urban areas, other similar larger parcels may be acquired. We fully understand the basis for the original ban on hunting, our interest is in continuing the social aspects of hunting and beneficial wildlife management.
Reasonable restrictions on numbers of hunters, limited range hunting methods, seasonal timing and information/education are key.
One key element we learned more about is the strong cultural subsistence hunting and fishing element present in under served groups in the urban area.
We are more than willing to discuss the positive values of hunting and how hunting can serve your public and management of the Metro properties.

Thanks for your consideration and inclusion,

Ken McCall
Resource Director
Oregon Hunters Association
541-602-1819
ken@oregonhunters.org

From: Jim@thayers.org [mailto:jim@thayers.org]
Sent: Thursday, September 28, 2017 12:50 AM
To: Mike Houck
Cc: Dan Moeller; tony@trackersearth.com; ken@oregonhunters.org; arlene.kimura@gmail.com; Philip.P.Wu@kp.org; mmeskel@audubonportland.org; Ted.labbe@gmail.com; jguzman@vivenw.org; bryan.cookoha@gmail.com; Sylvia Ciborowski; Laura Odom
Subject: Re: Title 10 Metro Sounding Board

Mike:

There are two aspects of this Sounding board that I find troubling.

1. The reliance on outdated scientific data, and Metro's biased analysis of new data to justify out-dated policies instead of embracing evidence of successful ways to manage interactions between dogs and wildlife.

Despite honest efforts to resolve this conflict, Metro is still handing out decades-old data that was conducted before modern monitoring technology gave us a much sharper image of what's going on in the woods. Apparently little effort was made to find new studies on dog and wildlife interactions. After just a few minutes of searching I found a 2016 study published by the Journal of Biological Conservation that used more than 34,000 data points. When I submitted this study, the response was defensive and focused on a single sentence that asserted that dogs accompanying their owners had a marginally larger impact than lone human hikers. What they ignored was that according to the study, people represent a much higher perceived risk; dogs presented the lowest perceived risk. In Metro's view this justified the expulsion of the least disturbing influence. Metro's approach to the scientific data is not genuine. It's used not used to shed light on the issue, but rather to justify a predetermined policy. Metro's policy-driven analysis of the scientific data will do lasting damage to the agency's reputation. That's my primary concern.

My second concern is that Metro is "taking" away one of our fundamental rights. As the Oregonian expressed it in their March 23, 2016 editorial, "Metro taxpayers have a reasonable right to make customary use of parkland they own".

For more than 40 years I and many Burlington locals have been walking our dogs in Burlington Woods, near the Old Growth Grove whose purchase I helped negotiate 30 years ago.
The Burlington Woods property was initially owned by John Hampton and later by Longview Fiber and both private companies explicitly permitted recreational dog walking. I even wrote a hiking book about this area - targeted to dog walkers that preferred more remote trails.

For 30 years I supported Metro's acquisitions. Then I volunteered to serve on a Metro task force where I learned to my astonishment that dogs were NOT permitted in any Metro park lands. I was stunned. When did we voters approve such a drastic move? How did Metro acquire the right to exclude all dog walkers from its parks?

I checked all the information provided to the public about the two Metro bonds and there was no mention of dogs. Even Metro's website was silent on the matter. None of the Metro's press releases about their new parks mentioned this crucial exclusion. Apparently, it was better to turn people with pets away at the park entrance than to publish the fact that Metro categorically banishes all dogs from their parks. That would have caused a stir, so Metro stayed silent.

Metro even refused to calculate the historical use of the Burlington Woods area by dog walkers, although they did so for every other activity. I challenged the taskforce to present a complete data set, including prior dog use, but they explicitly refused. That's because it had been regularly used by dog walkers like me for over thirty years and the data would have shown that Metro was effectively taking away that customary right.

Mike you're absolutely right that there was no fuss initially, but that's because the backers of the bond didn't want the "taking" of dog owners' rights to cause controversy and potentially spoil our appetite for this bond measure. That's why the documents, the press releases, and the websites were all silent on an issue that directly affects nearly half of Metro's inhabitants.

Mike you're also right that not all dog owners agree with me, but the latest SCORP report by the Oregon Parks and Recreation Department indicates that at least 49% of hikers in Metro's jurisdiction want more trails for walking their dogs.

Nonetheless lots of people do support the ban. Regardless of whether people agree or disagree with allowing dogs into parks, their opinion cannot be used to justify removing other people's rights - without an explicit referendum. People are free to hold whatever opinion they want. If they chose not to exercise their right it doesn't mean that others should also be prevented from exercising their rights. Let's put it more simply. If someone chooses not to vote it doesn't strip them of the right to do so later, nor does it affect the rights of others to vote. If some people don't want to walk their dogs in the woods that's fine, but it doesn't give them the right to "take" my rights away.

What really irks me about this conflict is that it could so easily be avoided. Modern trail design can accommodate many kinds of users from cyclists to dog walkers. I have never advocated that dogs should be given access to all parks. I have been vociferous in calling for better signage and stricter enforcement of leash laws. On the Columbia Land Trust board I have voted against granting access to both dogs and people on sensitive properties. Recent studies show that managing dog and dog owner behavior is effective and that wildlife will adapt. A total exclusion is unnecessary.

Jim Thayer

Sent from my iPad

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The ecological impact of humans and dogs on wildlife in protected areas in eastern North America

Arielle Waldstein Parsons [a,*], Christina Bland [b], Tavis Forrester [d,e], Megan C. Baker-Whatton [f], Stephanie G. Schuttler [a], William J. McShea [d], Robert Costello [c], Roland Kays [a,b,c]

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ABSTRACT

The establishment of protected areas is a key strategy for preserving biodiversity. However, human use of protected areas can cause disturbance to wildlife, especially in areas that allow hunting and if humans are accompanied by dogs (*Canis familiaris*). We used citizen-science run camera traps to investigate how humans, dogs and coyotes (*Canis latrans*) used 33 protected areas and analyzed behavioral responses by three prey species: white-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*) and northern raccoon (*Procyon lotor*). We obtained 52,863 detections of native wildlife, 162,418 detections of humans and 23,332 detections of dogs over 42,874 camera nights. Most dogs (99%) were on the trail, and 89% of off-trail dogs were accompanied by humans. Prey avoided dogs, humans and coyotes temporally, but did not avoid them spatially, or greatly increase vigilance. Our results indicate that humans are perceived as a greater risk than coyotes, and this increases when dogs accompany their owners. The concentration of dogs on the trail with their owners, and relatively minor behavioral impacts on prey, contrasts the strong negative ecological effects found in studies of free-ranging dogs. We found dog management to be effective: prohibiting dogs in protected areas reduced their use of an area by a factor of 10 and leash laws increased leashing rates by 21%. Although millions of dogs use natural areas in North America each year, regulations enacted by protected areas combined with responsible management of dog behavior greatly reduce the ecological impact of man's best friend.

1. Introduction

The establishment of protected areas is a key strategy for preserving biodiversity. Although they preserve habitat, protected areas typically do not eliminate human presence. On the contrary, people visit protected areas an estimated 8 billion times around the world every year, including 2 billion in the United States (Balmford et al., 2015). Nature recreation is important for conservation because it helps connect people with nature and broadens the constituency that values protecting land from development (Balmford et al., 2002; Wells and Lekies, 2006). However, human use of these areas can cause disturbance to wildlife, threatening the biodiversity preservation goals of protected areas.

Disturbance of wildlife by recreationists may provoke anti-predator responses such as fleeing, increasing vigilance, and changes in habitat use (Frid and Dill, 2002). Since there is a trade-off between avoiding a perceived risk and other fitness-enhancing activities, like feeding and finding a mate, disturbances by recreationalists can reduce animal fitness by disrupting optimal feeding, parental care, or mate choice (Beale, 2007; Beale and Monaghan, 2004; Frid and Dill, 2002). The risk-disturbance hypothesis provides a framework for understanding wildlife-human interactions, where responses by disturbed animals can be directly attributed to disturbance stimuli, responses being stronger when perceived risk is greater (Frid and Dill, 2002).

Human-caused disturbance can be compounded in areas that allow hunting (Frid and Dill, 2002) and if humans are accompanied by dogs (*Canis familiaris*) (Banks and Bryant, 2007; Miller et al., 2001; Weston and Stankowich, 2014). There are an estimated 78 million domestic dogs living in the United States (Gompper, 2014) and many owners visit protected areas with their dogs each year (Hughes and MacDonald, 2013). Protected areas often have leash laws which could

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0006-3207/

limit the interactions of dogs with wildlife, while others prohibit the dogs altogether. However, little data exist to evaluate the effectiveness of these policies in terms of ecological impacts, the extent to which owners obey leash laws, or how often dogs move off-trail and interact with wildlife (Ritchie et al., 2014; Vanak et al., 2014). While the lethal impacts of dogs on wildlife have been shown (Young et al., 2011), the indirect effects of dogs on vigilance (Vanak et al., 2009), feeding rates (Vanak et al., 2009), space use (Grignolio et al., 2011) and fecundity (Sheriff et al., 2009) of native wildlife is of equal concern. In a review of 69 peer-reviewed studies on dog-wildlife interactions, only three concluded that dogs had no impact (Hughes and MacDonald, 2013).

As development encroaches around protected areas in the United States and human use of these areas increases (Radeloff et al., 2010), understanding the impacts of recreation on wildlife is a key priority. Our previous research found that hiking and managed hunting did have an effect on mammal distribution, though to a lesser extent than habitat, however an analysis of the effect of dogs as an agent of disturbance was not considered (Kays et al., 2016). Thus, in this study we used the same camera trapping survey to investigate the use of protected areas by humans and dogs in the eastern United States. We predicted that most humans and dogs would be found on trails, and that leash laws would significantly decrease off-trail dog activity. To put the effects of humans and dogs in perspective, we compared the strength of their indirect ecological effects on wildlife with those of the second largest natural predator, coyotes (*Canis latrans*). We quantified these effects by evaluating the spatial and temporal avoidance of potential predators by three common prey species that vary in activity patterns (crepuscular, diurnal, nocturnal): white-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*) and northern raccoon (*Procyon lotor*). We also examined the effect of predator presence on white-tailed deer vigilance. Based on the risk-disturbance hypothesis, we predicted that wildlife would respond to humans, dogs and coyotes as predators and that the level of the response would be relative to the perceived risk. Specifically, we expected humans to be the highest perceived risk, given that humans actively hunt deer throughout the region. Likewise, we expected humans with dogs to be perceived as a greater risk than humans without dogs given the additional perceived risk imposed by dogs. We expected unattended dogs and coyotes to be perceived as a similar level of risk given their similar size and less predictable movement patterns off trails.

2. Material and methods

2.1. Citizen science camera trap surveys

From 2012 to 2013, 376 trained volunteers deployed 1951 unbaited camera traps across 33 protected areas (15 hunted, 18 not hunted) in the Southeastern United States (Fig. 1). Surveys were predominantly done in summer and fall outside of the hunting season with only a few deployments (<5) extending into the main rifle season. All sites had similar hunting regulations including weapon type allowed and whether hunting with dogs was permitted (Appendix D). All wildlife species examined in this study are legally hunted in the study area and are common in the Southeastern United States with white-tailed deer thought to exist at the highest densities among mammal species in that area (Horsley et al., 2003; Kays et al., 2016). Coyotes are the largest predator in the region, however the similar-sized bobcats (*Lynx rufus*) are also present at some sites. We define "protected areas" as publicly owned and managed land protected from private development. Protected areas were large tracts of core forest from 4 km^2 to 1200 km^2 (average = 140 km^2) surrounded by a range of rural (<0.5 house/km^2) to urban (>1000 houses/km^2) densities of development (Theobald, 2005). Twenty protected areas required that dogs be leashed, nine did not require leashes and four prohibited pets completely (Fig. 1). Each individual camera is considered a "camera site", and these were set in groups of three (hearafter "transect"): on, near (50 m) and far

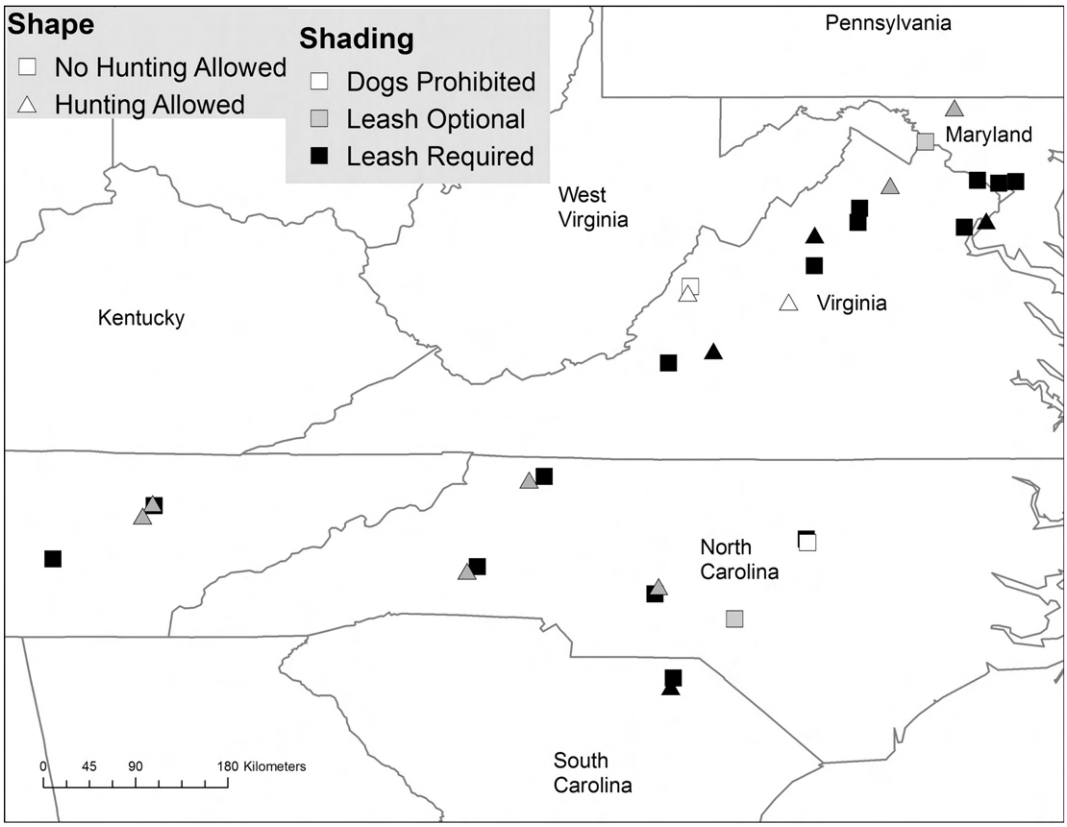

Fig. 1. Site map showing the 33 protected areas sampled and their dog and hunting regulations.

(200 m) from a hiking trail. Trail locations were chosen at random without regard for the distance to the trailhead. Associated 50 m and 200 m cameras were chosen at perpendicular Euclidean distances from the trail camera location and faced in the clearest direction to maximize detection distance. The direction from the trail was determined based on proximity to adjacent transects and accessibility (i.e. slope). Inappropriate off-trail locations (i.e. briar patches, steep slopes) were avoided and cameras were moved to a better location within 20 m of the original point. All adjacent cameras not within the same transect were spaced at least 200 m apart. Volunteers used Reconyx (RC55, PC800, and PC900, Reconyx, Inc. Holmen, WI) and Bushnell (Trophy Cam HD, Bushnell Outdoor Products, Overland Park, KS) camera traps equipped with an infrared flash and attached to trees at 40 cm above the ground and left them for three weeks before moving them to new locations. Cameras were not checked within that three-week period. Cameras recorded multiple photographs per trigger, at a rate of 1 frame/s, retriggering immediately if the animal was still in view. For analysis we grouped consecutive photos into sequences if they were <60 s apart, and used these sequences as independent records for subsequent analysis. We assessed the adequacy of this temporal independence using by-minute temporal autocorrelation functions in Program JMP (SAS, Cary, NC, USA) for each species at their top 10 most active sites (i.e. the sites most likely to have temporal autocorrelation). Initial species identifications were made by volunteers using customized software (eMammal.org) and all were subsequently reviewed for accuracy before being archived at the Smithsonian Digital Repository (McShea et al., 2016). We used the detection rate (the number of detections of a given species divided by the total number of camera-nights, hereafter "DR") to compare the relative activity levels of each species. Though not immune to issues of heterogeneity in detection probabilities, because sites were selected at random relative to animal movement, and not baited, DR is a valid comparison across our sites (Rowcliffe et al., 2013).

2.2. Dog distribution

To evaluate if off-trail dogs were accompanied by a human we examined all three cameras from the same transect that detected the off-trail dog to see if a human passed within 5 min. We used an ANOVA in Program JMP to test for an effect of leash laws on dog activity (DR and % of dogs that went off-trail) and leashing rate (coded from a subset of n = 50 randomly selected photos/protected area).

2.3. Spatial avoidance

We used two-species conditional occupancy models (Richmond et al., 2014) to assess deer, squirrel and raccoon spatial avoidance of each predator (humans without dogs, attended dogs, unattended dogs, coyotes) using Package RMark in Program R (Team, 2011). We included covariates to account for variation in detection and occupancy due to habitat and weather (Appendix A). We diagnosed univariate correlations between covariates using a Pearson correlation matrix, and omitted variables correlated >0.60. All continuous variables were mean-centered. We tested housing density, edge and the amount of forest at two scales, 5 km and 250 m, that most closely reflected reported home range sizes of each species (Koprowski, 1994; Lotze and Anderson, 1979; Walter et al., 2009) and protected area size. We ran a suite of 20 detection probability models for each species except the human predators where we removed People_site as a covariate, then picked the most parsimonious model of each within the top three QAIC points (Burnham and Anderson, 2002) to use in our occupancy models (Appendix B). We ran a suite of 27 occupancy models for each species and used the top models in our two-species models (Appendix B). We compared four 2-species models for each predator/prey combination using QAIC, including models incorporating trail as a categorical grouping covariate, models incorporating the top single-species models and models including DR covariates for each predator not explicitly being modeled (e.g. coyote DR was included in the attended dog models) to account for possible interactions between predators that may influence prey site occupancy (Appendix C).

2.4. Temporal avoidance

We used the time series of detections from a given camera to test the relative avoidance of a site by prey after the passage of a predator. We call these measures Avoidance-Attraction Ratios (AAR), and they can be created either by comparing the time interval after/before a predator passes (T2/T1) or with/without the passage of a predator (T4/T3, Fig. 2). T1 is the length of time between an initial prey passage and the predator passage and T2 is the length of time between the passage of a predator and a subsequent prey passage (Fig. 2). T3 is the average length of time between successive prey detections without a predator in the middle while T4 is the same measure with a predator between (Fig. 2). Because we calculate these values for each camera site separately, these ratios are robust to differences in detection probability between predator and prey species since the passage rates are a relative, not absolute, measure of the use of a site.

T2/T1 could be influenced both by the avoidance of the prey and the attraction of the predator, while T4/T3 is influenced solely by the avoidance of the predator by the prey. Where multiple predators of the same species passed consecutively before the next deer detection, the total time from the first predator detection to the next prey detection was calculated for T2 to account for increases in scent deterring prey. We considered interactions where only one type of predator appeared between successive prey detections in order to avoid potential confounding effects of multiple predator types. We compared T2/T1 ratios between perceived predators for each species using the Wilcoxon method in Program JMP. We tested the effect of hunting on the magnitude of the log transformed T2/T1 ratio on and off trails for each perceived predator using t-tests in Program JMP.

2.5. Deer vigilance

To evaluate if deer perceive dogs as a threat, we analyzed the vigilance behavior of solitary deer in a subset of approximately 100 randomly selected sequences in every protected area. For each sequence of a solitary deer, we recorded whether the individual was exhibiting vigilant (head up, above shoulder), neutral (head below shoulder,

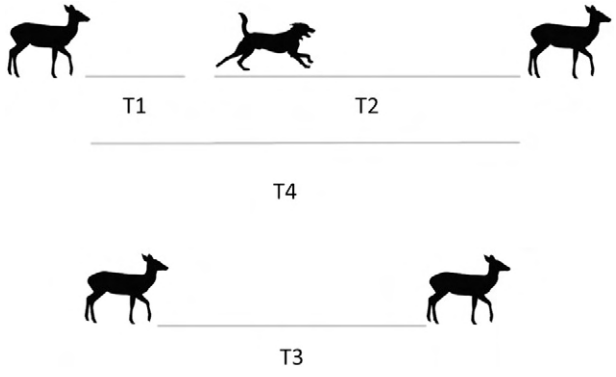

Fig. 2. Procedure for using data from a single camera trap to calculate Avoidance-Attraction Ratios (AARs) estimating within-site temporal avoidance or attraction of two species. T1 is the time from the initial deer detection to the first subsequent predator detection. T2 is the time from that first predator detection to the subsequent deer detection. If multiple predators pass before the next deer T2 is still taken from the first predator. T4 is the sum of T1 and T2 and represents the time between successive deer detections with a predator detection between them, while T3 is the time between successive deer detections without a predator between them. Values >1 for T2/T1 or T4/T3 suggest nonrandom movement between the two species indicating that the prey is avoiding the area after the passage of a predator. Attraction of a predator to a prey could also result in high T2/T1 ratios, but would result in lower ratios of T4/T3.

above knee), or non-vigilant behavior (head below knee) (Lashley et al., 2014). To ensure a more accurate representation of the behavior of each individual, we only scored individuals that had at least five photos within a sequence. If a deer looked at the camera we stopped scoring the sequence to exclude data potentially biased from the presence of the camera. We used a Wilcoxon signed-rank test in Program JMP to compare deer vigilance between sites on and off trails that were and were not used by three classes of "predator": humans without dogs (dogs not detected within 5 min, human not holding a leash), attended dogs (dogs <5 min from a human, leashed or not), unattended dogs (dogs without humans) and coyotes.

3. Results

3.1. Dog, human and wildlife distribution

We obtained 52,863 detections of native wildlife, 162,418 detections of humans and 23,332 detections of domestic dogs with 42,874 camera nights of survey effort across 1951 locations in 33 protected areas. Only 7% of site examined showed temporal autocorrelation >25%. White-tailed deer was the most commonly detected native wildlife species overall (0.64/day) followed by eastern gray squirrel (0.25/day) and northern raccoon (0.08/day). Most dogs (99%) were detected on-trails, where they were more commonly detected than the most common native predator, coyotes (coyote: 0.10/day, dog: 1.58/day). Dogs were less frequently detected off-trails (0.00 dogs/day) than coyotes (0.02/day) but were still more common off-trails than red foxes (*Vulpes vulpes*) (0.006/day), bobcats (0.004/day) and gray foxes (*Urocyon cinereoargenteus*) (0.003/day) (Fig. 3). Most protected areas (88%) had at least some off-trail dogs. The only species examined that were caught actively being chased on camera were white-tailed deer being chased by unattended dogs (recorded 5 times) or coyotes (recorded 4 times). Three incidents of unattended dogs chasing deer were of packs of 2–4 dogs, the remaining incidents were of what appeared to be solitary individuals.

Most (82%) off-trail dogs were detected <5 min from a nearby human. Humans were detected off trails very rarely (0.60% of all human detections). Therefore, we assumed that off-trail dogs not within 5 min of a human on the trail (or off the trail) were unattended. Across all detections, 97% of dogs were accompanied by humans and most unaccompanied dogs were on-trails (87%). Twenty-three percent of unattended dogs were running in packs of 2–4 individuals, likewise 24% of attended dogs were in groups of 2–8. Most dogs were off-leash (on-trail: 60%; off-trail: 84%). Leash laws reduced the frequency of unleashed dogs by 21% (55% with leash law, 76% without). Only 0.80% of dogs were photographed at night, and only 16 dogs were documented running off-trail at night without a leash. Leashing rates decreased farther from the trailhead, suggesting that owners may have let their dogs off leash after their walk began.

We detected dogs in all protected areas sampled, even where dogs were prohibited. Areas prohibiting dogs had 16 times fewer dogs per day than sites allowing dogs ($F = 10.28$, $df = 1895$, $p < 0.0001$), but a higher percentage (13%) of those dogs went off-trail ($t = 7.61$, $df = 280$, $p = 0.0006$, Fig. 4). Dog detections were strongly positively correlated with the rate that humans without dogs were detected, on and off-trails (On: $F = 1029.73$, $df = 665$, $p < 0.001$, Off: $F = 454.96$, $df = 1299$, $p < 0.0001$). However, off-trail dog detections were not significantly correlated with on-trail human detection rate ($F = 0.31$, $df = 648$, $p = 0.58$). Human DR was highest in areas where leashes were required (mean = 8.87, SE = 2.25) and lowest where dogs were prohibited (mean = 3.70, SE = 2.98).

3.2. Spatial avoidance

Across all sites, occupancy was highest for deer followed by gray squirrel and raccoon. The amount of daily cloud cover explained the most variation in detection probability for coyote, raccoon, attended dogs, humans without dogs and squirrels (Appendix B). Measures of edge explained the most variation in occupancy for attended dogs, humans without dogs, deer and squirrels (Appendix B). Our two-species occupancy models showed no significant spatial avoidance, however all prey species tended to avoid trail sites with unattended dogs. The probability of raccoon site occupancy was actually higher where coyotes were present (Fig. 5). A similar increase in occupancy was found for squirrels where unattended dogs were present off trails (Fig. 5).

3.3. Temporal avoidance

All species temporally avoided humans with and without dogs more than any other predator, with the exception of northern raccoons, which temporally avoided coyotes more than humans without dogs. AAR avoidance was significantly stronger for attended dogs than the other predators for all species and ranged from 7 to 3 times higher (eastern gray squirrel and white-tailed deer respectively) than any other predator (Fig. 6). Likewise, AAR avoidance was stronger over all species for humans without dogs than unattended dogs (7–5 times stronger, squirrel and raccoon respectively). AAR avoidance was 3 times stronger for humans without dogs than coyotes for all species except raccoon (Fig. 6). AAR avoidance was weakest for unattended dogs for all species (2–10 times weaker, deer/squirrel and raccoon respectively) but this was only statistically significant for deer (Fig. 6). Deer living in protected

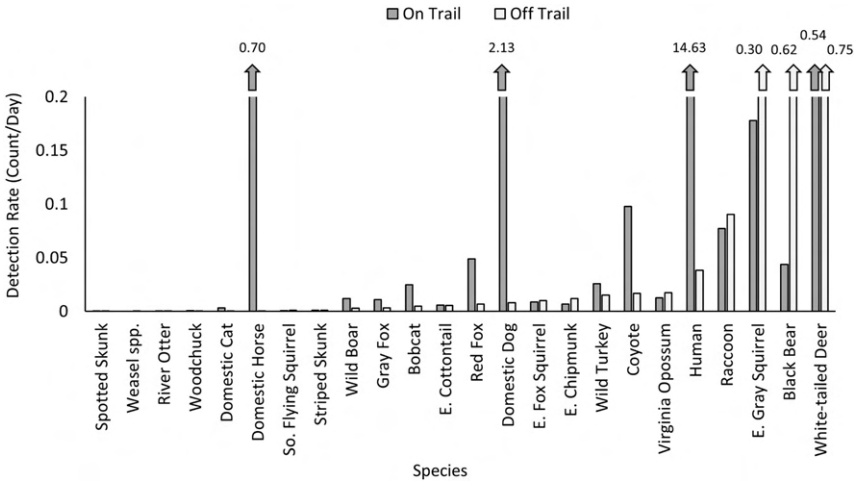

Fig. 3. Detection rates (count/day) for all species detected over all cameras sorted by highest off trail detection rate.

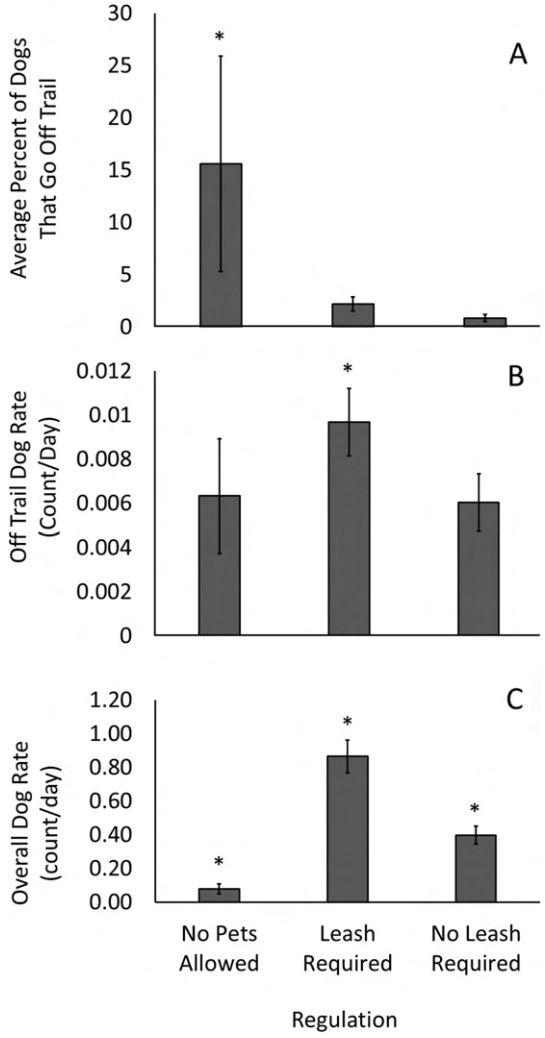

Fig. 4. Leash laws in relation to the (A) average percent of dogs off-trail, (B) average off-trail dog detection rate and (C) average dog detection rate for on and off-trail dogs. Data came from 145 camera sites in areas with no pets allowed, 302 with no leash required and 785 with leashes required. Error bars represent the standard error of the mean, and * indicates a significant difference from the other two regulation categories.

areas with recreational hunting had lower temporal avoidance of attended dogs by (on trails: $t = -3.70$, $p = 0.0002$, off trails: $t = -2.13$, $p = 0.04$). Squirrels also showed significantly less temporal avoidance of on-trail attended dogs in hunted areas (2 times less, $t = -2.44$, $p = 0.02$). We found no other significant differences in temporal avoidance between hunted and unhunted areas.

3.4. Deer vigilance

On average, deer were vigilant 22% of the time, head-down 44% of the time and head intermediate 34% of the time. Deer vigilance was 3% higher at sites where coyotes and humans without dogs were also detected and 2% higher at sites where attended dogs were also detected, though not all of these differences were significant (Table 1). Vigilance was 1% higher at sites without unattended dogs, though this difference was not statistically significant (Table 1). There were no significant differences in vigilance when on and off-trail sites were considered separately (Table 1).

4. Discussion

Our large scale camera trap survey showed that humans and dogs are the two most common mammals using protected areas across the region, but that their activity is highly concentrated along hiking trails. Our analysis of behavioral responses by wildlife to humans and dogs found little significant spatial avoidance, small increases in vigilance behavior, and a variable but important temporal avoidance. These metrics allow us to evaluate the ecological impact of humans and dogs within the risk-disturbance framework (Frid and Dill, 2002) by comparing them with a natural predator (coyotes). Contrasting these factors across parks with different regulations about dogs and hunting also allows us to evaluate the effectiveness of these management decisions on the wildlife-human conflict associated with outdoor recreation.

Of our three approaches to quantify disturbance of wildlife, the measures of temporal avoidance showed the most significant effects. Humans, as predicted, were the highest perceived risk, with all three prey species avoiding sites longest after people passed. Dogs by themselves had the lowest perceived risk in our comparisons. However, temporal avoidance was greatest for people accompanied by a dog. This compounding effect of dogs on the disturbance of wildlife has also been found for birds (Banks and Bryant, 2007; Weston et al., 2014) and other mammals (Mainini et al., 1993; Miller et al., 2001).

Our assessment of wildlife disturbance through spatial avoidance or increased vigilance showed few significant impacts. All species tended to spatially avoid unattended dogs on trails, but the results were not statistically significant. Deer increased their vigilance at sites with humans alone, but not at sites with dogs or coyotes. In a separate analysis of vigilance data incorporating intensity of human activity rather than simple presence/absence, we found that vigilance decreased as human activity increased (Schuttler et al. 2016, unpublished data). This difference is likely due to habituation in areas of heavy human traffic, something we did not examine in detail in this study (Recarte et al., 1998).

The three prey species in our study showed no significant spatial avoidance of unattended dogs, lower temporal avoidance in comparison with other predators, and no changes in deer vigilance related to dog activity. These minor impacts contrast a large body of work showing that free-ranging dogs are more detrimental to wildlife than leashed dogs (Hughes and MacDonald, 2013; Silva-Rodríguez and Sieving, 2012; Weston and Stankowich, 2014). We suspect that this difference is a reflection of the overall rarity of free ranging dogs in the protected areas we surveyed. Given that 99% of dogs are on the trails and 97% are with people, only a small fraction of the interactions between dogs and wildlife will be with truly free ranging dogs. Where these interaction occur, it seems that packs of free ranging dogs may present more of a threat than single dogs. Packs were responsible for at least 60% of recorded interactions with deer in our study, however the majority of dogs did not appear to be in packs and most were attended by people. We suspect that prey species in this region have adjusted their disturbance response to dogs in general to reflect the relatively low risk posed by an on-trail dog walking with its owner.

We expected unattended dogs and coyotes to be similar in perceived risk by prey given their similar size and unpredictable off-trail movement, however, all prey species temporally avoided coyotes more than unattended dogs and showed no significant spatial avoidance of either species. Indeed, spatially raccoons had higher occupancy at sites also occupied by coyotes which could indicate similar habitat preferences or active pursuit by coyotes. We found a similar result for squirrels and unattended dogs off trails. Despite evidence that unattended dogs and coyotes both pursue deer, deer showed no temporal avoidance of either species, no changes in vigilance and relatively low temporal avoidance. Since the extirpation of wolves from the Southeast in the mid-1900s, deer have no predators to regulate their populations, except human hunters (Wallach et al., 2015). Coyotes are a recent arrival to the Southeast and it is unclear whether deer are responding to coyotes as an apex predator in the same way they would wolves. Coyotes do depredate deer, although typically fawns rather than adults in the Southeast (Kilgo et al., 2010). The minimal reactions of deer found in our study suggest that neither coyotes nor humans are perceived as a strong threat by adult deer.

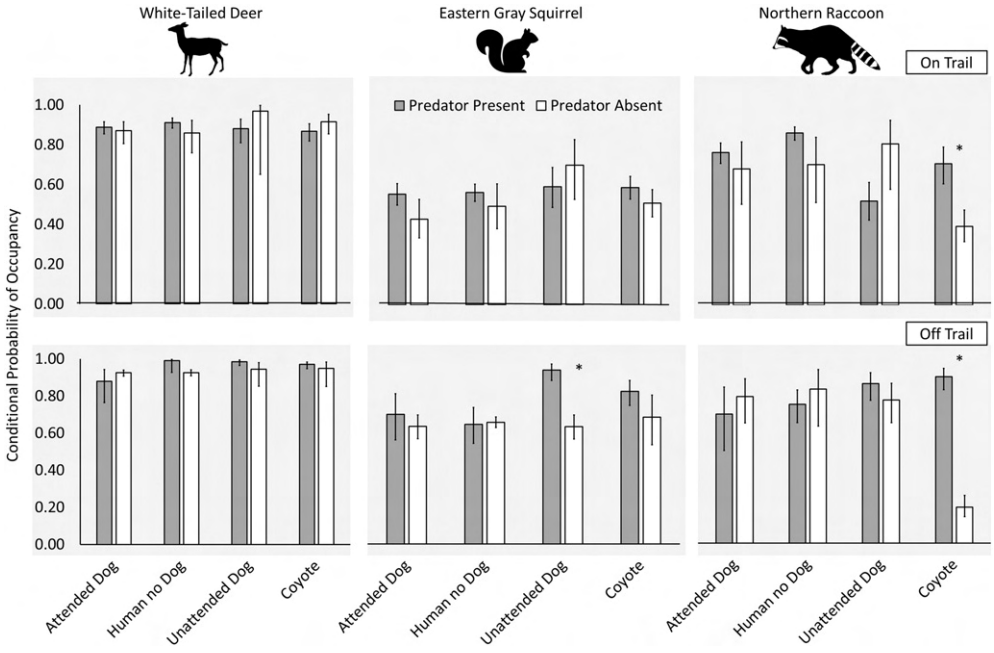

Fig. 5. Conditional probability of white-tailed deer, eastern gray squirrel and raccoon occupancy in the presence and absence of different potential predators on and off trails. Error bars show 95% confidence interval, * indicates a significant difference in occupancy between predator presence and absence based on non-overlapping 95% confidence intervals.

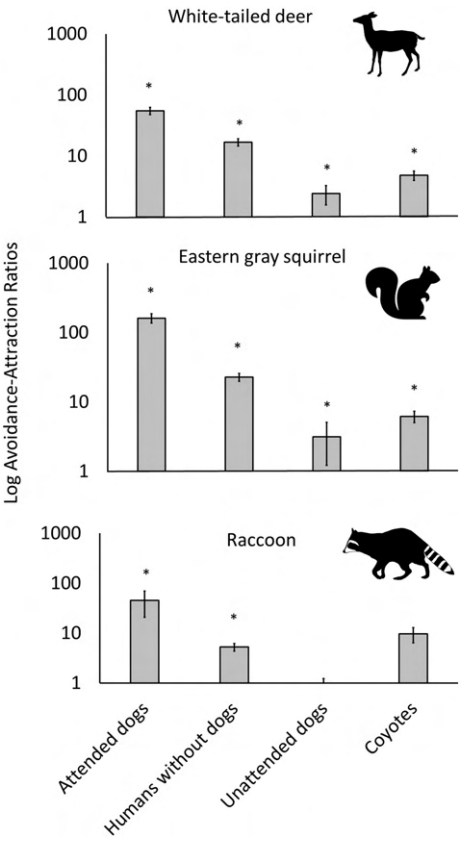

Fig. 6. Temporal avoidance of an area by three prey species after the passage of four different potential predators. Avoidance-attraction ratios (AAR) larger than 1 show avoidance, with larger values indicating longer times before revisiting a site. (*) denotes a significant difference ($\alpha = 0.05$) in AAR from the other three predators. Humans with and without dogs were avoided more than coyotes or unattended dogs by all three species. Only raccoons showed significantly higher avoidance of coyotes compared to humans without dogs.

Our report is the first large scale assessment of dogs in protected areas in the United States, offering the best estimate of what proportion of dogs are free ranging in the region and the effect of management regulations on dog owner behavior. Dogs were abundant in each of the 33 protected areas sampled, and often were the most commonly detected nonhuman mammal. We found widespread disregard for leash laws in parks, especially when hikers got farther away from trailheads where enforcement was more likely. This rate was lower than smaller nearby parks (Leung et al., 2015), but consistent with past studies of compliance from around the world (Weston et al., 2014). Despite this blatant disregard for leashing laws, most dogs were still found on the trail walking with their owners, and thus were not a strong source of disturbance to the region's wildlife (Forrest and St. Clair, 2006; Reed and Merenlender, 2011).

Few studies have investigated the benefits of dog management on reducing impacts of pet recreation on wildlife. Past studies of dog management regulations have found no effect on wildlife diversity and abundance (Forrest and St. Clair, 2006; Reed and Merenlender, 2011), however management that increases leashing rates would conceivably decrease indirect effects of disturbance on fitness (Weston et al., 2014). Despite the general disregard for management regulations, requiring leashes did increase leashing rate by 21%. Likewise, rules prohibiting dogs decreased dog activity by 87% and decreased people walking dogs off trails by 90%. This shows that dog management regulations do help control dog behavior and can succeed in reducing the impact of dogs.

We predicted that protected areas that allowed hunting would have animals more easily disturbed by recreational hikers, since humans would be real threats to wildlife, at least during hunting season. To the contrary, we found that deer and squirrels living in areas that allowed hunting had weaker temporal avoidance of attended dogs. We found no significant effect of hunting for any other predator or prey species, consistent with our earlier study of the effects of recreation on wildlife (Kays et al., 2016). These results are contrary to other studies which have shown increased flight responses to people in hunted populations of ungulates versus unhunted populations (Stankowich, 2008).

Table 1
Deer vigilance compared at sites (on trails, off trail and combined) where potential predator species were and were not detected. Predators were humans without dogs, attended dogs (dogs < 5 min from a human, leashed or not), unattended dogs (dogs without humans) and coyotes. Comparisons were done using a Wilcoxon signed-rank test. Significant differences are in bold.

Predator	Effect size (with-without)	n (with, without)	SE (with, without)	χ^2	df	p
On trail						
Attended dog	−0.11%	(170, 67)	(1.54%, 2.69%)	0.03	1	0.87
Human without dog	2.55%	(208, 29)	(1.45%, 3.41%)	0.22	1	0.64
Unattended dog	0.42%	(50, 187)	(3.33%, 1.45%)	0.12	1	0.73
Coyote	−1.96%	(130, 107)	(1.59%, 2.27%)	0.01	1	0.91
Off trail						
Attended dog	−6.81%	(38, 501)	(2.46%, 0.96%)	3.09	1	0.08
Human without dog	2.42%	(49, 490)	(2.98%, 0.96%)	0.98	1	0.32
Unattended dog	−3.62%	(21, 518)	(3.22%, 0.94%)	0.11	1	0.75
Coyote	2.81%	(98, 441)	(2.11%, 1.01%)	2.09	1	0.15
Combined						
Attended dog	−0.08%	(208, 568)	(1.36%, 0.90%)	0.19	1	0.66
Human without dog	**2.66%**	(257, 519)	(1.30%, 0.92%)	4.03	1	0.04
Unattended dog	0.09%	(71, 705)	(2.54%, 0.79%)	0.01	1	0.91
Coyote	1.51%	(228, 548)	(1.28%, 0.92%)	3.14	1	0.08

5. Conclusions

We found that dogs are the most common non-human mammal using protected areas in the Eastern USA, but that their activity is highly concentrated along trails. We found relatively little spatial or behavioral response of prey species to dogs or humans, but temporal avoidance suggests that humans are perceived as a greater risk by wildlife relative to unattended dogs and coyotes. Furthermore, dogs walking with humans increase the perceived risk, causing wildlife to avoid an area for a greater amount of time than in response to humans alone. Free-ranging dogs were not perceived as a high risk by wildlife, contrasting strong negative ecological effects found in other studies of free-ranging dogs (Vanak and Gompper, 2009; Vanak et al., 2009; Young et al., 2011). These results show how the responsible control of dog behavior by their owners can minimize disturbance of wildlife. We also found that regulations by protected area managers succeed in reducing the impact of dogs; prohibiting dogs in protected areas reduced their use of an area by a factor of 10 while leash laws increased leashing rates by 21% (45% leashed with leash law, 24% without). Although millions of dogs use natural areas each year, regulations enacted by protected areas combined with responsible management of dog behavior by pet owners work together to reduce the ecological impact of dogs and increase outdoor enjoyment by hikers and their pets.

Acknowledgements

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Appendix A. Covariates used for occupancy modeling

Covariates	Shorthand	Units	Source
Detection probability			
Cloud cover	Cloud	Percent, daily	NCEP-DOE surface total cloud cover entire atmospheric column
Temperature	Temp	Celsius, daily	ECMWF interim full daily SFC temperature (2 m above ground)
Precipitation	Precip	Milliliters, daily	NCEP NARR precipitation rate at surface
Year	Year	Year	
Canopy cover	NDVI	Percent, site-average	MODIS land terra vegetation indices 1 km monthly NDVI
Hiker count	People	Count/site	
Hunting	Hunting	Yes/no	
Detection distance	Det_dist	Meters, site specific	
Occupancy			
Housing density (5 km radius)	HDens_5 km	Houses/km^2	Silvis housing density dataset
Large core forest (5 km radius)	LC_5 km	Percent	USGS GAP landcover dataset
Edge (5 km radius)	Edge_5 km	Percent	USGS GAP landcover dataset
Housing density (250 m radius)	HDens_250 m	Houses/km^2	Silvis housing density dataset
Large core forest (250 m radius)	LC_250 m	Percent	USGS GAP landcover dataset
Edge (250 m radius)	Edge_250 m	Percent	USGS GAP landcover dataset
Hunting	Hunting	Yes/no	
Distance to nearest trailhead	Trailhead	Meters	
Latitude × longitude	LatbyLong	Decimal degrees	
On or off trail	Trail	Categorical group	

Appendix B. Single-species occupancy model selection tables. Detection model selection was done using the most parameterized occupancy model. Because of high overdispersion, all model selection was done using QAIC

Detection models attended dog	df	Neg2LnL	QAIC	Delta QAIC
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + hunting + trail)	8	15,827.39	2374.83	0
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + trail)	9	15,816.9	2375.27	0.44
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	15,792.61	2375.65	0.82
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	15,827.39	2376.83	2
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	15,816.9	2377.27	2.44
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	15,866.5	2380.66	5.83
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	15,866.5	2382.66	7.83
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	15,897.32	2383.25	8.42
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	15,873.11	2383.64	8.81
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	15,897.32	2385.25	10.42
Occupancy models attended dog				
p(~Cloud)Psi(~Trailhead + Hunting)	5.00	16,840.34	1711.13	0.00
p(~Cloud)Psi(~Edge_5 km + Hunting)	5.00	16,848.77	1711.99	0.85
p(~Cloud)Psi(~Edge_5 km)	4.00	16,871.44	1712.28	1.14
p(~Cloud)Psi(~Edge_250 m)	4.00	16,874.50	1712.59	1.45
p(~Cloud)Psi(~Hunting)	4.00	16,910.15	1716.19	5.05
p(~Cloud)Psi(~1)	3.00	16,935.80	1716.78	5.64
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	8.00	16,844.84	1717.59	6.45
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	8.00	16,847.26	1717.83	6.70
p(~Cloud)Psi(~HDens_5 km + Hunting)	5.00	16,907.00	1717.87	6.73
p(~Cloud)Psi(~HDens_5 km)	4.00	16,927.12	1717.90	6.77
p(~Cloud)Psi(~LC_5 km + Hunting)	5.00	16,908.70	1718.04	6.91
p(~Cloud)Psi(~HDens_250 m + Hunting)	5.00	16,908.97	1718.07	6.93
p(~Cloud)Psi(~LC_250 m + Hunting)	5.00	16,910.08	1718.18	7.04
p(~Cloud)Psi(~HDens_250 m)	4.00	16,933.26	1718.52	7.39
p(~Cloud)Psi(~LC_5 km)	4.00	16,933.35	1718.53	7.40
p(~Cloud)Psi(~LatbyLong)	4.00	16,935.29	1718.73	7.59
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	9.00	16,836.69	1718.77	7.63
p(~Cloud)Psi(~LC_250 m)	4.00	16,935.78	1718.78	7.64
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	9.00	16,838.32	1718.93	7.80
p(~Cloud)Psi(~LC_5 km + HDens_5 km + Hunting)	6.00	16,906.93	1719.86	8.73
p(~Cloud)Psi(~LC_5 km + HDens_5 km)	5.00	16,927.11	1719.90	8.77
p(~Cloud)Psi(~LC_250 m + HDens_250 m + Hunting)	6.00	16,908.66	1720.04	8.90
p(~Cloud)Psi(~LC_250 m + HDens_250 m)	5.00	16,932.97	1720.49	9.36
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	7.00	16,905.64	1721.73	10.60
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	7.00	16,907.83	1721.95	10.82
Detection models unattended dog				
p(~NVDI_site + People_site + Temp + Cloud + Precip + Year + Det_dist)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	14	2948.74	1946.15	0
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2964.76	1946.58	0.42
p(~NVDI_site + People_site + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	2960.57	1947.85	1.7
p(~People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	2964.76	1948.58	2.42
p(~NVDI_site + People_site + Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	12	2960.57	1949.85	3.7
p(~NVDI_site + People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	2964.07	1950.13	3.97
p(~People_site + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2970.97	1950.61	4.46
p(~People_site + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	2970.97	1952.61	6.46
p(~People_site)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	2979.42	1954.11	7.96
p(~People_site + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2979.42	1956.11	9.96
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2980.95	1957.11	10.96
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	2985.4	1958	11.85
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	2980.95	1959.11	12.96
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	2987.94	1959.65	13.5
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2985.4	1960	13.85
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	2980.04	1960.51	14.36
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2987.51	1961.37	15.22
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	2987.94	1961.65	15.5
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	2996.35	1963.12	16.97
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	2996.35	1965.12	18.97
Occupancy models unattended dog				
p(~People_site + Temp)Psi(~LC_5 km)	5	3109.00	579.12	0.00
p(~People_site + Temp)Psi(~HDens_5 km)	5	3116.17	580.43	1.31
p(~People_site + Temp)Psi(~LC_5 km + HDens_5 km)	6	3106.31	580.62	1.51
p(~People_site + Temp)Psi(~LC_5 km + Hunting)	6	3106.73	580.70	1.58
p(~People_site + Temp)Psi(~1)	4	3133.72	581.64	2.53
p(~People_site + Temp)Psi(~HDens_5 km + Hunting)	6	3114.58	582.14	3.02
p(~People_site + Temp)Psi(~LC_5 km + HDens_5 km + Hunting)	7	3104.88	582.36	3.25
p(~People_site + Temp)Psi(~Hunting)	5	3128.26	582.64	3.53
p(~People_site + Temp)Psi(~LC_250 m)	5	3129.92	582.95	3.83

(*continued*)

Detection models attended dog	df	Neg2LnL	QAIC	Delta QAIC
p(~People_site + Temp)Psi(~HDens_250 m)	5	3131.50	583.23	4.12
p(~People_site + Temp)Psi(~Edge_5 km)	5	3131.92	583.31	4.19
p(~People_site + Temp)Psi(~Trailhead + Hunting)	6	3121.12	583.34	4.22
p(~People_site + Temp)Psi(~LatbyLong)	5	3132.51	583.42	4.30
p(~People_site + Temp)Psi(~Edge_250 m)	5	3132.87	583.49	4.37
p(~People_site + Temp)Psi(~LC_250 m + Hunting)	6	3124.96	584.04	4.92
p(~People_site + Temp)Psi(~HDens_250 m + Hunting)	6	3126.68	584.35	5.24
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	8	3104.84	584.35	5.24
p(~People_site + Temp)Psi(~Edge_5 km + Hunting)	6	3127.06	584.42	5.31
p(~People_site + Temp)Psi(~LC_250 m + HDens_250 m)	6	3128.69	584.72	5.60
p(~People_site + Temp)Psi(~LC_250 m + HDens_250 m + Hunting)	7	3124.15	585.89	6.77
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	9	3104.13	586.22	7.11
p(~People_site + Temp)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	8	3123.57	587.78	8.67
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	10	3104.01	588.20	9.09
p(~People_site + Temp)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	9	3122.18	589.53	10.41
p(~People_site + Temp)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	10	3118.38	590.83	11.72
Detection models humans without dogs				
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	21,862.51	1951.67	0
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	21,818.95	1951.81	0.15
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	21,862.51	1953.67	2
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	21,916.92	1954.48	2.81
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	21,916.92	1956.48	4.81
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	21,979.33	1958	6.33
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	21,956.74	1958	6.33
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	21,979.33	1960	8.33
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	21,956.74	1960	8.33
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	21,970.02	1961.17	9.51
Occupancy models humans without dogs				
p(~Cloud)Psi(~Edge_250 m)	4.00	23,152.54	2808.32	0.00
p(~Cloud)Psi(~Edge_5 km)	4.00	23,153.03	2808.38	0.06
p(~Cloud)Psi(~Trailhead + Hunting)	5.00	23,139.19	2808.70	0.39
p(~Cloud)Psi(~Edge_5 km + Hunting)	5.00	23,144.58	2809.36	1.04
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	8.00	23,136.01	2814.32	6.00
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	8.00	23,138.35	2814.60	6.28
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	9.00	23,132.50	2815.89	7.58
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	9.00	23,133.76	2816.05	7.73
p(~Cloud)Psi(~1)	3.00	23,247.03	2817.75	9.43
p(~Cloud)Psi(~Hunting)	4.00	23,237.01	2818.54	10.22
p(~Cloud)Psi(~HDens_5 km)	4.00	23,239.81	2818.87	10.56
p(~Cloud)Psi(~LC_5 km)	4.00	23,242.72	2819.23	10.91
p(~Cloud)Psi(~LC_250 m)	4.00	23,243.13	2819.28	10.96
p(~Cloud)Psi(~LatbyLong)	4.00	23,245.33	2819.54	11.22
p(~Cloud)Psi(~HDens_250 m)	4.00	23,245.82	2819.60	11.28
p(~Cloud)Psi(~HDens_5 km + Hunting)	5.00	23,233.12	2820.06	11.75
p(~Cloud)Psi(~LC_250 m + Hunting)	5.00	23,233.43	2820.10	11.78
p(~Cloud)Psi(~LC_5 km + Hunting)	5.00	23,233.58	2820.12	11.80
p(~Cloud)Psi(~HDens_250 m + Hunting)	5.00	23,236.41	2820.46	12.14
p(~Cloud)Psi(~LC_5 km + HDens_5 km)	5.00	23,239.28	2820.81	12.49
p(~Cloud)Psi(~LC_250 m + HDens_250 m)	5.00	23,242.72	2821.23	12.91
p(~Cloud)Psi(~LC_5 km + HDens_5 km + Hunting)	6.00	23,232.27	2821.96	13.64
p(~Cloud)Psi(~LC_250 m + HDens_250 m + Hunting)	6.00	23,233.32	2822.09	13.77
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	7.00	23,228.10	2823.46	15.14
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	7.00	23,230.36	2823.73	15.41
Detection models coyote				
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,196.05	2384.25	0
p(~NVDI_site + People_site + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	10,179.65	2384.44	0.19
p(~People_site + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,202.14	2385.66	1.41
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	10,211.14	2385.75	1.5
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	10,196.05	2386.25	2
p(~NVDI_site + People_site + Temp + Cloud + Precip + Year + Det_dist)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	14	10,162.07	2386.36	2.11
p(~NVDI_site + People_site + Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	12	10,179.65	2386.44	2.19
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	10,188.83	2386.57	2.32
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,209.01	2387.25	3.01
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	10,219.27	2387.64	3.39
p(~People_site + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	10,202.14	2387.66	3.41
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,211.14	2387.75	3.5
p(~NVDI_site + People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	10,198.32	2388.77	4.53
p(~People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	10,209.01	2389.25	5.01
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,219.27	2389.64	5.39
p(~People_site)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	10,238.55	2392.11	7.86
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,230.07	2392.14	7.89

(*continued on next page*)

(*continued*)

Detection models attended dog	df	Neg2LnL	QAIC	Delta QAIC
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	10,247.89	2392.28	8.03
p(~People_site + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	10,238.55	2394.11	9.86
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	10,247.89	2394.28	10.03
Occupancy models coyote				
p(~Cloud)Psi(~LC_250 m)	4.00	10,455.31	2434.42	0.00
p(~Cloud)Psi(~LC_250 m + Hunting)	5.00	10,448.26	2434.78	0.36
p(~Cloud)Psi(~Edge_250 m)	4.00	10,459.44	2435.37	0.96
p(~Cloud)Psi(~HDens_5 km + Hunting)	5.00	10,451.14	2435.45	1.03
p(~Cloud)Psi(~LC_250 m + HDens_250 m)	5.00	10,453.57	2436.01	1.60
p(~Cloud)Psi(~HDens_5 km)	4.00	10,464.24	2436.49	2.07
p(~Cloud)Psi(~LC_250 m + HDens_250 m + Hunting)	6.00	10,447.12	2436.51	2.10
p(~Cloud)Psi(~LC_5 km + HDens_5 km + Hunting)	6.00	10,448.11	2436.74	2.33
p(~Cloud)Psi(~LC_5 km + HDens_5 km)	5.00	10,462.27	2438.03	3.61
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	7.00	10,446.03	2438.26	3.85
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	7.00	10,446.35	2438.34	3.92
p(~Cloud)Psi(~1)	3.00	10,480.97	2438.37	3.95
p(~Cloud)Psi(~Edge_5 km + Hunting)	5.00	10,464.12	2438.46	4.04
p(~Cloud)Psi(~Edge_5 km)	4.00	10,473.17	2438.56	4.15
p(~Cloud)Psi(~Hunting)	4.00	10,474.97	2438.98	4.56
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	8.00	10,444.08	2439.81	5.39
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	8.00	10,444.87	2439.99	5.58
p(~Cloud)Psi(~LC_5 km)	4.00	10,479.80	2440.10	5.68
p(~Cloud)Psi(~LatbyLong)	4.00	10,480.83	2440.34	5.92
p(~Cloud)Psi(~HDens_250 m)	4.00	10,480.95	2440.37	5.95
p(~Cloud)Psi(~Trailhead + Hunting)	5.00	10,473.09	2440.54	6.13
p(~Cloud)Psi(~LC_5 km + Hunting)	5.00	10,473.42	2440.62	6.20
p(~Cloud)Psi(~HDens_250 m + Hunting)	5.00	10,474.96	2440.98	6.56
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	9.00	10,441.87	2441.30	6.88
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	9.00	10,442.69	2441.49	7.07
Detection models white-tailed deer				
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,465.81	1944.46	0
p(~NVDI_site + People_site + Temp + Cloud + Precip + Year + Det_dist)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	14	47,392.05	1951.47	7.01
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	47,808.3	1956.36	11.9
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	47,871.91	1956.94	12.48
p(~People_site + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,796.75	1957.89	13.43
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,808.3	1958.36	13.9
p(~People_site)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	47,859.5	1958.44	13.98
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,811.33	1958.48	14.02
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	47,871.91	1958.94	14.48
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	47,873.3	1959	14.54
p(~People_site + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	47,796.75	1959.89	15.43
p(~People_site + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,859.5	1960.44	15.98
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	47,811.33	1960.48	16.02
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,861.21	1960.51	16.05
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	47,873.3	1961	16.54
p(~NVDI_site + People_site + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	47,796.85	1961.9	17.44
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	47,807.59	1962.33	17.87
p(~People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	47,861.21	1962.51	18.05
p(~NVDI_site + People_site + Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	12	47,796.85	1963.9	19.44
p(~NVDI_site + People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	47,858.3	1964.39	19.93
Occupancy models white-tailed deer				
p(~Det_dist + Year)Psi(~Edge_250 m)	5.00	47,458.22	1952.59	0.00
p(~Det_dist + Year)Psi(~Edge_5 km)	5.00	47,460.07	1952.66	0.08
p(~Det_dist + Year)Psi(~HDens_5 km)	5.00	47,491.71	1953.96	1.37
p(~Det_dist + Year)Psi(~1)	4.00	47,544.16	1954.11	1.52
p(~Det_dist + Year)Psi(~Trailhead + Hunting)	6.00	47,448.15	1954.18	1.59
p(~Det_dist + Year)Psi(~Edge_5 km + Hunting)	6.00	47,455.36	1954.47	1.88
p(~Det_dist + Year)Psi(~LC_5 km)	5.00	47,505.93	1954.54	1.95
p(~Det_dist + Year)Psi(~HDens_250 m)	5.00	47,536.17	1955.78	3.19
p(~Det_dist + Year)Psi(~Hunting)	5.00	47,538.68	1955.88	3.29
p(~Det_dist + Year)Psi(~HDens_5 km + Hunting)	6.00	47,491.40	1955.95	3.36
p(~Det_dist + Year)Psi(~LatbyLong)	5.00	47,541.83	1956.01	3.42
p(~Det_dist + Year)Psi(~LC_250 m)	5.00	47,543.81	1956.09	3.50
p(~Det_dist + Year)Psi(~LC_5 km + Hunting)	6.00	47,500.26	1956.31	3.72
p(~Det_dist + Year)Psi(~LC_5 km + HDens_5 km)	6.00	47,504.52	1956.48	3.90
p(~Det_dist + Year)Psi(~HDens_250 m + Hunting)	6.00	47,531.77	1957.60	5.01
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	9.00	47,387.07	1957.67	5.09
p(~Det_dist + Year)Psi(~LC_250 m + HDens_250 m)	6.00	47,534.80	1957.72	5.13
p(~Det_dist + Year)Psi(~LC_250 m + Hunting)	6.00	47,538.27	1957.86	5.28
p(~Det_dist + Year)Psi(~LC_5 km + HDens_5 km + Hunting)	7.00	47,499.80	1958.29	5.70
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	8.00	47,473.23	1959.20	6.61
p(~Det_dist + Year)Psi(~LC_250 m + HDens_250 m + Hunting)	7.00	47,530.51	1959.55	6.96

(*continued*)

Detection models attended dog	df	Neg2LnL	QAIC	Delta QAIC
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	10.00	47,386.91	1959.67	7.08
p(~Det_dist + Year)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	9.00	47,443.87	1960.00	7.41
p(~Det_dist + Year)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	8.00	47,528.72	1961.47	8.89
p(~Det_dist + Year)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	10.00	47,438.30	1961.77	9.18
Detection models northern raccoon				
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	16,809.33	1952.53	0
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,801.06	1953.58	1.05
p(~People_site + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,802.88	1953.79	1.26
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,809.33	1954.53	2
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	16,801.06	1955.58	3.05
p(~People_site + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	16,802.88	1955.79	3.26
p(~NVDI_site + People_site + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	16,786.32	1955.88	3.35
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	16,793.21	1956.67	4.14
p(~NVDI_site + People_site + Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	12	16,786.32	1957.88	5.35
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	16,856.81	1958	5.47
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	16,883.99	1959.13	6.6
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,849.88	1959.2	6.67
p(~NVDI_site + People_site + Temp + Cloud + Precip + Year + Det_dist)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	14	16,766.11	1959.55	7.02
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,856.81	1960	7.47
p(~People_site)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	16,877.95	1960.44	7.91
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,860.9	1960.47	7.94
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	16,883.99	1961.13	8.6
p(~People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	16,849.88	1961.2	8.67
p(~People_site + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	16,877.95	1962.44	9.91
p(~NVDI_site + People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	16,846.99	1962.87	10.34
Occupancy models northern raccoon				
p(~Cloud)Psi(~HDens_5 km)	4.00	16,849.72	1952.70	0.00
p(~Cloud)Psi(~LC_5 km)	4.00	16,853.15	1953.10	0.40
p(~Cloud)Psi(~LC_5 km + HDens_5 km)	5.00	16,842.53	1953.87	1.17
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	7.00	16,809.86	1954.10	1.40
p(~Cloud)Psi(~1)	3.00	16,881.58	1954.38	1.68
p(~Cloud)Psi(~Edge_5 km)	4.00	16,866.11	1954.59	1.89
p(~Cloud)Psi(~LatbyLong)	4.00	16,866.36	1954.62	1.92
p(~Cloud)Psi(~Trailhead + Hunting)	5.00	16,849.09	1954.63	1.93
p(~Cloud)Psi(~HDens_5 km + Hunting)	5.00	16,849.63	1954.69	1.99
p(~Cloud)Psi(~LC_5 km + Hunting)	5.00	16,851.48	1954.90	2.20
p(~Cloud)Psi(~Edge_250 m)	4.00	16,870.36	1955.08	2.38
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	8.00	16,806.12	1955.67	2.97
p(~Cloud)Psi(~HDens_250 m)	4.00	16,875.96	1955.73	3.03
p(~Cloud)Psi(~LC_5 km + HDens_5 km + Hunting)	6.00	16,842.25	1955.84	3.14
p(~Cloud)Psi(~Hunting)	4.00	16,878.65	1956.04	3.34
p(~Cloud)Psi(~LC_250 m)	4.00	16,881.40	1956.36	3.66
p(~Cloud)Psi(~Edge_5 km + Hunting)	5.00	16,864.87	1956.45	3.75
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	9.00	16,801.20	1957.10	4.40
p(~Cloud)Psi(~HDens_250 m + Hunting)	5.00	16,874.02	1957.50	4.80
p(~Cloud)Psi(~LC_250 m + HDens_250 m)	5.00	16,875.86	1957.72	5.02
p(~Cloud)Psi(~LC_250 m + Hunting)	5.00	16,878.53	1958.03	5.32
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	8.00	16,834.99	1959.00	6.30
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	9.00	16,820.52	1959.33	6.63
p(~Cloud)Psi(~LC_250 m + HDens_250 m + Hunting)	6.00	16,873.91	1959.49	6.79
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	7.00	16,858.75	1959.74	7.04
Detection models eastern gray squirrel				
p(~Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,429.77	1947.4	0
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	30,466.31	1947.72	0.32
p(~Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	30,429.77	1949.4	2
p(~People_site + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,462.97	1949.51	2.1
p(~Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,466.31	1949.72	2.32
p(~NVDI_site + People_site + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	30,423.85	1951.03	3.62
p(~NVDI_site + Precip + Temp + Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	30,426.38	1951.19	3.79
p(~People_site + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	30,462.97	1951.51	4.1
p(~NVDI_site + People_site + Temp + Cloud + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	12	30,423.85	1953.03	5.62
p(~NVDI_site + People_site + Temp + Cloud + Precip + Year + Det_dist)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	14	30,380.12	1954.26	6.85
p(~Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	30,644.19	1959	11.6
p(~People_site + Temp)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,642.14	1960.87	13.47
p(~Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,644.19	1961	13.6
p(~Det_dist + Year)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,670.21	1962.65	15.25
p(~People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	10	30,642.14	1962.87	15.47
p(~1)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	7	30,749.68	1963.69	16.28
p(~NVDI_site + People_site + Temp + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	11	30,626.26	1963.86	16.46

(*continued on next page*)

(*continued*)

Detection models attended dog	df	Neg2LnL	QAIC	Delta QAIC
p(~People_site)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	30,746.46	1965.48	18.08
p(~Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	8	30,749.68	1965.69	18.28
p(~People_site + Precip)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting + Trail)	9	30,746.46	1967.48	20.08
Occupancy models eastern gray squirrel				
p(~Cloud)Psi(~Edge_5 km)	4.00	30,391.63	1950.21	0.00
p(~Cloud)Psi(~Edge_5 km + Hunting)	5.00	30,389.77	1952.09	1.88
p(~Cloud)Psi(~Edge_250 m)	4.00	30,469.21	1955.17	4.96
p(~Cloud)Psi(~Trailhead + Hunting)	5.00	30,452.51	1956.10	5.89
p(~Cloud)Psi(~LatbyLong)	4.00	30,489.81	1956.48	6.27
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting)	8.00	30,369.33	1956.78	6.57
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Edge_5 km + Hunting + Trailhead)	9.00	30,357.48	1958.03	7.82
p(~Cloud)Psi(~1)	3.00	30,553.16	1958.53	8.32
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting)	8.00	30,404.02	1959.00	8.79
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Edge_250 m + Hunting + Trailhead)	9.00	30,380.66	1959.51	9.30
p(~Cloud)Psi(~HDens_5 km)	4.00	30,543.37	1959.91	9.70
p(~Cloud)Psi(~LC_250 m)	4.00	30,546.10	1960.08	9.87
p(~Cloud)Psi(~LC_5 km)	4.00	30,551.52	1960.43	10.22
p(~Cloud)Psi(~HDens_250 m)	4.00	30,552.71	1960.50	10.29
p(~Cloud)Psi(~Hunting)	4.00	30,553.12	1960.53	10.32
p(~Cloud)Psi(~LC_5 km + HDens_5 km)	5.00	30,531.26	1961.13	10.92
p(~Cloud)Psi(~HDens_5 km + Hunting)	5.00	30,543.04	1961.88	11.68
p(~Cloud)Psi(~LC_250 m + HDens_250 m)	5.00	30,544.34	1961.97	11.76
p(~Cloud)Psi(~LatbyLong + LC_5 km + HDens_5 km + Hunting)	7.00	30,482.94	1962.04	11.83
p(~Cloud)Psi(~LC_250 m + Hunting)	5.00	30,546.03	1962.08	11.87
p(~Cloud)Psi(~LatbyLong + LC_250 m + HDens_250 m + Hunting)	7.00	30,486.24	1962.25	12.05
p(~Cloud)Psi(~LC_5 km + Hunting)	5.00	30,551.44	1962.42	12.21
p(~Cloud)Psi(~HDens_250 m + Hunting)	5.00	30,552.69	1962.50	12.29
p(~Cloud)Psi(~LC_5 km + HDens_5 km + Hunting)	6.00	30,530.52	1963.08	12.88
p(~Cloud)Psi(~LC_250 m + HDens_250 m + Hunting)	6.00	30,544.33	1963.97	13.76

Appendix C. Two-species occupancy model selection tables. Single-species detection models were either the most parsimonious detection model within the top 3 QAIC points in Appendix B (p(top)), a trail-only model (p(Trail)) or a null model (p(.)). Single-species occupancy models were either the top models in Appendix B with the addition of predator and trail covariates (psi(topPredsTrail) or a trail-only model (psi(Trail)). Trail only models had only a categorical Trail covariate. Preds indicates that predator DR other than the one explicitly being modeled were included as covariates. Because of high overdispersion, all model selection was done using QAIC. When models did not converge (*), the next best model was used to generate Psi estimates

Deer-attended dog	df	neg2L	QAIC	Delta QAIC	Model did not converge
p(Trail)psi(Trail)	16	18,630.80	1894.21	0.00	*
p(.)psi(Trail)	11	19,509.97	1972.08	77.88	
p(top)psi(Trail)	19	19,377.41	1974.83	80.63	
p(top)psi(topPredsTrail)	27	19,249.04	1978.00	83.79	
Deer-human without dog					
p(Trail)psi(Trail)	16	18,962.43	1846.47	0.00	*
p(top)psi(Trail)	19	20,139.79	1965.13	118.66	
p(.)psi(Trail)	11	20,309.32	1965.35	118.88	
p(top)psi(topPredsTrail)	26	20,128.02	1978.00	131.53	*
Deer-coyote					
p(Trail)psi(Trail)	16	19,218.63	1904.93	0.00	
p(.)psi(Trail)	11	19,866.63	1958.08	53.15	
p(top)psi(Trail)	19	19,798.78	1967.47	62.54	*
p(top)psi(topPredsTrail)	26	19,773.45	1979.00	74.07	*
Deer-unattended dog					
p(Trail)psi(Trail)	16	15,298.25	1957.27	0.00	*
p(top)psi(topPredsTrail)	28	15,280.20	1979.00	21.73	
p(top)psi(Trail)	21	15,404.43	1980.63	23.36	
p(.)psi(Trail)	11	15,606.86	1986.11	28.84	
Squirrel-attended dog					
p(Trail)psi(Trail)	16	16,097.46	1905.70	0.00	*
p(top)psi(topPredsTrail)	24	16,555.41	1975.00	69.30	
p(top)psi(Trail)	16	16,720.94	1978.27	72.57	
p(.)psi(Trail)	11	16,902.77	1989.43	83.74	
Squirrel-human without dog					
p(Trail)psi(Trail)	16	16,379.07	1866.89	0.00	*
p(top)psi(Trail)	16	17,301.50	1970.23	103.34	
p(top)psi(topPredsTrail)	23	17,210.23	1974.00	107.11	

(*continued*)

Deer-attended dog	df	neg2L	QAIC	Delta QAIC	Model did not converge
p(.)psi(Trail)	11	17,467.47	1978.82	111.93	
Squirrel-coyote					
p(Trail)psi(Trail)	16	16,874.01	1933.70	0.00	
p(top)psi(Trail)	16	17,172.45	1967.33	33.63	
p(top)psi(topPredsTrail)	23	17,107.40	1974.00	40.30	
p(.)psi(Trail)	11	17,351.01	1977.45	43.76	
Squirrel-unattended dog					
p(top)psi(Trail)	18	12,995.25	1974.62	0.00	
p(top)psi(topPredsTrail)	25	12,910.68	1976.00	1.38	
p(Trail)psi(Trail)	16	13,056.16	1979.70	5.09	
p(.)psi(Trail)	11	13,262.15	2000.43	25.82	
Raccoon-attended dog					
p(Trail)psi(Trail)	16	13,549.90	1958.33	0.00	
p(top)psi(topPredsTrail)	24	13,561.62	1976.00	17.67	*
p(top)psi(Trail)	16	13,921.39	2011.15	52.81	
p(.)psi(Trail)	11	14,011.23	2013.92	55.59	*
Raccoon-human without dog					
p(Trail)psi(Trail)	16	13,721.70	1906.27	0.00	
p(top)psi(topPredsTrail)	23	14,137.05	1977.00	70.73	*
p(.)psi(Trail)	11	14,496.48	2002.09	95.83	*
p(top)psi(Trail)	16	14,431.41	2003.21	96.94	*
Raccoon-coyote					
p(Trail)psi(Trail)	16	14,312.47	1933.6	0.00	
p(.)psi(Trail)	11	14,635.66	1966.5	32.94	
p(top)psi(Trail)	16	14,571.67	1968	34.44	
p(top)psi(topPredsTrail)	23	14,497.55	1972.2	38.59	
Raccoon-unattended dog					
p(top)psi(topPredsTrail)	25	10,582.86	1960.8	0.00	*
p(top)psi(Trail)	18	10,705.76	1969	8.19	*
p(Trail)psi(Trail)	16	10,729.36	1969.3	8.45	*
p(.)psi(Trail)	11	10,864.22	1983.6	22.80	

Appendix D. List of protected areas surveyed and their characteristics

Name	Size (km^2)	Hunting weapons allowed	Dog hunting allowed?	Species hunted	Deer firearm season length (days)	Camera sites
C & O Canal National Historical Park	82	No Hunting				57
Carvins Cove Nature Reserve	51	No Hunting				65
Catoctin Mountain Park/Cunningham Falls State Park	44	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	72
Cheraw State Park	28	No Hunting				66
Fall Creek Falls State Park	105	No Hunting				68
Frozen Head State Natural Area	53	No Hunting				68
Frozen Head State Park Emory Tract	125	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	51	50
Gambrill State Park	4.5	No Hunting				27
George Washington National Forest	4289	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	55
Greenbelt Park	4.8	No Hunting				46
Harpers Ferry National Historical Park	15	No Hunting				36
Jefferson National Forest	2792	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	60
Lone Mountain State Forest	14	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	51	53
Mason Neck State Park and Wildlife Refuge	16	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	75
Morrow Mountain State Park	18	No Hunting				66
Prince William Forest Park	65	No Hunting				80
Rock Creek Park	11	No Hunting				112
Sandhills State Forest	189	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	92	66
Shenandoah National Park North	203	No Hunting				58
Shenandoah National Park Central	281	No Hunting				52
Shenandoah National Park South	315	No Hunting				55
South Mountains Gameland	88	Archery, Muzzleloader, Firearm	No	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	75	62

(*continued on next page*)

(*continued*)

Name	Size (km^2)	Hunting weapons allowed	Dog hunting allowed?	Species hunted	Deer firearm season length (days)	Camera sites
South Mountains State Park	405	No Hunting				60
Stone Mountain State Park	58	No Hunting				61
Thompson Wildlife Management Area	16	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	71
Thurmond Chatham Gameland	26	Archery, Muzzleloader, Firearm	No	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	75	61
Umstead State Park	23	No Hunting				69
Uwharrie National Forest	205	Archery, Muzzleloader, Firearm	No	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	75	68
Warm Springs Mountain TNC Reserve Hunted	69.4	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	60
Warm Springs Mountain TNC Reserve Not Hunted	56.3	No Hunting				65
Weymouth Woods-Sandhills Nature Preserve	3.70	No Hunting				58
Wintergreen Resort	44.5	Archery, Muzzleloader, Firearm	Yes	White-tailed deer (antlered and antlerless), coyote, raccoon, squirrel	15	60

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The impacts of dogs on wildlife and water quality: A literature review

Compiled by Lori Hennings, Metro Parks and Nature, April 2016

SUMMARY

Metro periodically reviews the science literature behind its natural resource policies to ensure policies are based on the most current science. Recently staff reviewed the scientific literature regarding the impacts of dogs on wildlife to inform Metro Regulatory Code Title 10.01, which excludes pets from most Metro properties. The only exceptions are service dogs, leashed dogs on some regional trails, Broughton Beach, boat ramps and properties managed by others through intergovernmental agreements that are integrated into larger parks where leashed dogs are allowed (e.g., Forest Park).

Any human related activity can disturb wildlife. In order to meet Metro's dual goals of protecting natural resources and providing access to nature, Metro has tried to strategically locate trails in less sensitive habitat and to ensure that human activity is as non-disruptive as possible. Part of that strategy has been to allow public access, while limiting certain activities such as bringing dogs into natural areas.

The evidence that dogs negatively impact wildlife is overwhelming. It is clear that people with dogs – on leash or off – are much more detrimental to wildlife than people without dogs. Dogs (*Canis lupus familiaris*) are considered to be a subspecies of wolves (*Canis lupus*), and wildlife perceive dogs as predators.[30] Impacts include:

1. **Physical and temporal displacement** – The presence of dogs causes wildlife to move away, temporarily or permanently reducing the amount of available habitat in which to feed, breed and rest. Animals become less active during the day to avoid dog interactions. Furthermore, the scent of dogs repels wildlife and the effects remain after the dogs are gone.
2. **Disturbance and stress response** – Animals are alarmed and cease their routine activities. This increases the amount of energy they use, while simultaneously reducing their opportunities to feed. Repeated stress causes long-term impacts on wildlife including reduced reproduction and growth, suppressed immune system and increased vulnerability to disease and parasites.
3. **Indirect and direct mortality** – Dogs transmit diseases (such as canine distemper and rabies) to and from wildlife. Loose dogs kill wildlife.
4. **Human disease and water quality impacts** - Dog waste pollutes water and transmits harmful parasites and diseases to people.

INTRODUCTION

Metro owns 17,000 acres of parks and natural areas and does not allow dogs or other pets on the vast majority of these lands. Exceptions include service animals, leashed dogs on some regional trails, Broughton Beach, boat ramps and certain properties managed by others through intergovernmental

agreements that are integrated into larger parks where leashed dogs are allowed (e.g., Forest Park). The policy that prohibits visitors from bringing pets to most of Metro's managed parks and natural areas was initiated by Multnomah County in the 1980s and continued in practice after Metro assumed management of those parks in the early 1990s. After a review of the scientific literature and meaningful public discourse, Metro formally adopted the pets policy into its code in 1997 (Metro Council Regulatory code Title 10.01 adopted in Ordinance 96-659A).

To ensure this decision reflects the most up-to-date information, Metro staff examined 54 peer-reviewed scientific journal articles and several research reports relating to the impacts of dogs in natural areas, including numerous literature reviews on the impacts of various types of recreation on wildlife and habitat.[10, 28, 42,54,61,63, 65,68,71,73,77] The results of our literature review are summarized below.

PHYSICAL AND TEMPORAL DISPLACEMENT

Displacement may be the most significant impact due to the amount of habitat affected. The presence of dogs causes most wildlife to move away from an area, which temporarily or permanently reduces the amount of functionally available habitat to wildlife. The research is clear that people with dogs disturb wildlife more than humans alone.[5,10,33,38,39,41,44,61,68,69] These effects reduce a natural area's carrying capacity for wildlife, and also reduces wildlife viewing experiences for visitors.

Studies on a variety of wildlife in many countries and settings demonstrate that dogs along trails and in natural areas significantly alter wildlife behavior.[9,33,39,41,49,53,58] A 2011 literature review found negative dog effects in all 11 papers that examined such effects.[65] Studies demonstrate dog-specific impacts on reptiles,[29,31,48] shorebirds and waterfowl,[24,32,51,69] songbirds,[5,9,10] small mammals,[33,39,56] deer, elk and bighorn sheep,[4,36,38,44,49,59,63] and carnivores.[22,33,52,58]

A study in France found that two hikers disturbed an area of 3.7 hectares walking near wild sheep, whereas two hikers with dogs disturbed 7.5 hectares around the sheep.[41] In Chicago, migratory songbirds were less abundant in yards with dogs.[9] Dog walking in Australian woodlands led to a 35% reduction in bird diversity and a 41% reduction in the overall number of birds.[5] The same study showed some disturbance of birds by humans, but typically less than half that induced by dogs.

Studies in California and Colorado showed that bobcats avoided areas where dogs were present, including spatial displacement[22,33,52] and temporal displacement in which bobcats switched to night time for most activities.[22] The Colorado study also demonstrated significantly lower deer activity near trails specifically in areas that allowed dogs, and this effect extended at least 100 meters off-trail.[33] This negative effect was also true for small mammals including squirrels, rabbits, chipmunks and mice, with the impact extending at least 50 meters off-trail.

Evidence suggests that some wildlife species can habituate to certain predictable, non-threatening disturbances such as people walking on a trail in a natural area; this effectively lowers the stress response. Part of this adaptation may be due to wildlife learning what is and isn't a threat, and also

avoidance of hunters.[19,55,63,70] Habituated animals still react, but amount of habitat affected is not as large.[55,56,63,70] However, dogs – especially off-leash dogs – may prevent wildlife habituation because wildlife consistently see them as predators. Dog-specific disturbance has been studied for birds, with no evidence of habituation even with leashed dogs, even where dog-walking was frequent; this effect was much weaker for people without dogs.[5]

Even the scent of dog urine or feces can trigger wildlife to avoid an area. Therefore, the impacts of dog presence can linger long after the dog is gone, even days later. One literature review found that predator odors caused escape, avoidance, freezing, and altered behavior in a large suite of wildlife species including scores of amphibian, reptile, bird, and mammal species from other studies.[30] The scent of domestic dogs has been shown to repel American beaver (*Castor Canadensis*), mountain beaver (*Aplodontia rufa*), deer (*Odocoileus* species), elk (*Cerus elaphus*), and a wide variety of wildlife native to other countries.[20,30] Mountain beaver cause economic damage to young tree stands in the Pacific Northwest, and foresters are considering using dog urine as a repellant.[20] An experimental study demonstrated that dog feces are an effective repellent for sheep, with no habituation observed over seven successive days.[1]

One Colorado study showed mixed effects of dogs on wildlife.[44] The study compared effects of pedestrians alone, pedestrians with leashed dogs and unleashed dogs alone on grassland birds. Vesper Sparrows (*Pooecetes gramineus*) and Western Meadowlarks (*Sturnella neglecta*) waited until dogs were closest to flush – that is, they fly or run away. This could be an attempt to remain undetected against the greatest threat, but could also mean that these bird species perceive humans as a greater threat than dogs. However, the same study found strong dog-specific impacts on mule deer in woodlands. A literature review found that ungulates (deer, elk and sheep) had stronger flight responses in open habitats compared to forested habitats.[63] Unlike small ground-nesting songbirds, larger animals would have no cover and could easily be seen in open habitats.

The disturbance effects of off-leash dogs are stronger than on-leash and substantially expand the amount of wildlife habitat affected,[32,59,63,69] and the unpredictability of off-leash dogs may prevent wildlife habituation in large areas of habitat.[5,10,32,61,69] The negative effects are increased even further when dogs and people venture off-trail, probably because their behavior is less predictable.[44,67] Off-leash dogs are likely to reduce the number and types of wildlife in large areas of habitat.

A Colorado study found off-leash dogs ventured up to 85 meters from the trail, although this result was from 1 square meter plots covering a very small percentage of the area.[33] Remote cameras in another study documented the same dog 1.5 miles apart in the same day.[61] In Utah, mule deer showed a 96% probability of flushing within 100 meters of recreationists located off trails; their probability of flushing did not drop to 70% until the deer were 390 meters from the recreationists.[67] A California shorebird study found that off-leash dogs were a disproportionate source of disturbance, and that plovers did not habituate to disturbance; birds were disturbed once every 27 minutes on weekends.[32]

To illustrate the potential of dogs to displace wildlife we explored two well-known local park examples that allow dogs on leash. Forest Park is one of the largest urban parks in the U.S. and was always intended to connect urban dwellers with nature; people have been walking their dogs there since before the park's 1948 dedication. Forest Park covers 5,172 acres of forest, including approximately 80 miles of trails and service. Using a very conservative 25-meter buffer around mapped trails to represent the "human + dog on leash" area of disturbance and assuming 100% compliance with leash rules, the area affected would be 1,406 acres – that's 28% of the entire park. In 651-acre Tryon Creek Natural Area, 207 acres of land (32%) is within 25 meters of a trail.

DISTURBANCE AND STRESS RESPONSE

Stress response is the functional response of an animal to an external stressor, such as seasonal changes in temperature and food availability or sudden disturbance.[3] Specific stress hormones are released to enable the animal to physically respond to the stressor. Acute stress response, when an animal reacts to an immediate situation, can benefit an animal by triggering it to respond appropriately to a threat. However, chronic stress such as repeated disturbances over time may reduce wildlife health, reproduction, growth, impair the immune system and increase vulnerability to parasites and diseases.[16,27,75]

Dogs cause wildlife to be more alert, which reduces feeding, sleeping, grooming and breeding activities and wastes vital energy stores that may mean life or death when resources are low, such as during winter or reproduction.[8,32,40,41,69] Animals release stress hormones and their heart rates elevate in response.[3,27,37,38] When stress becomes too high, animals may flush, freeze, or hide.[26,30]

Several studies document that disturbance reduces reproductive success for some wildlife species.[11,35,40,50,63] Numerous studies found that female deer and elk, and deer and elk groups with young offspring, show greater flight responses to human disturbances than other groups.[63] Stress hormones may cause male songbirds to reduce their territorial defense, females to reduce feeding of their young, nestlings to have reduced weight and poor immune systems, and adult birds to abandon nests.[11,34,35,76] A Colorado study showed that elk repeatedly approached by humans had fewer young.[50] Although research is lacking on whether dogs specifically reduce the reproductive success of wildlife, the fact that humans with dogs create much stronger disturbance effects than without dogs [5,33,38,41,44,61,68,69] implies that these stress effects would be magnified if people had dogs with them.

INDIRECT AND DIRECT MORTALITY

Dogs chase and kill many wildlife species including reptiles, small mammals, deer and foxes.[12,13,29,31,48,58,62] A Canadian study found that domestic dogs were one of the top three predators that killed white-tailed deer fawns.[4] In northern Idaho winter deer grounds, an Idaho Fish and Game conservation officer witnessed or received reports of 39 incidents of dogs chasing deer, directly resulting in the deaths of at least 12 animals.[36] A study in southern Chile revealed that domestic dogs preyed on

most of the mammal species present in the study area.[60] A 2014 literature review of dogs in parks identified 19 studies that investigated the effects of dogs preying on wildlife.[73] Of these, 13 reported observing or finding strong evidence of dog predation on wildlife. The Audubon Society of Portland's Wildlife Care Center took in 1,681 known "dog-caught" injured animals from 1987 through March 2016.[2]

Dogs transmit diseases to wildlife and vice versa including rabies, Giardia, distemper and parvovirus.[18,23,66,74] A Mexico City study concluded that feral dogs continually transmitted parvovirus, toxoplasmosis and rabies to wildlife including opossums, ringtails, skunks, weasels and squirrels.[66] Large carnivores such as cougars are especially vulnerable to domestic dog diseases including canine distemper.[74]

HUMAN DISEASE AND WATER QUALITY IMPACTS

Under the Oregon Department of Environmental Quality (DEQ), Metro is a Designated Management Agency to protect water quality in compliance with the federal Clean Water Act. Limiting dog access at most natural areas is one of Metro's commitments to DEQ, because dog feces pollute water. Feces are often delivered to waterways through stormwater.[57] The average dog produces ½ to ¾ pound of fecal matter each day – a hundred dogs can produce more than 500 pounds of waste per week.[45] The DEQ identifies pet waste as a significant contributor to one of the region's most ubiquitous and serious pollutants, *E. coli* bacteria. Contact with *E. coli*-polluted water can make people sick. Because dog waste can be a relatively simple source to reduce or eliminate exposure to *E. coli*, DEQ considers reducing or eliminating dog waste an important action item in jurisdictions' clean water implementation plans for the Willamette Basin watershed.[47]

Humans can catch parasites and diseases such as hookworms (causes rash), roundworms (may cause vision loss in small children, rash, fever, or cough) and salmonella (causes gastrointestinal illness) from dog waste.[7,57] Aside from potential illnesses, dog waste can negatively affect visitors' experience in a natural area. Dog waste left on the ground is a leading complaint in Portland parks, and violators may be fined up to $150 per incident.[14]

Several examples illustrate local dog impacts. A Clean Water Services DNA study found that dog waste alone accounts for an average of 13% of fecal bacteria in stream study sites in the Tualatin River Basin.[17] Off-leash dog walking is documented to cause erosion in Portland's Marshall Park, creating sediment problems in stream water.[15] In 2014 Portland school administrators expressed concern because playgrounds had become "a minefield for animal waste" from people using school grounds as after hours, off-leash dog parks, threatening the health of school children.[21] The City of Gresham found extremely high levels of *E. coli* bacteria in water quality samples of a very specific stretch of a stream, where dog feces were found along stream banks behind several yards with dogs.[1] The city sent letters to

[1] Personal communication with Katie Holzer, Watershed Scientist at the City of Gresham, Oregon, 4/11/2016.

residents in the neighborhood about the incident and how to properly dispose of dog feces; the levels have not been elevated in follow-up sampling.

BELIEF, BEHAVIOR AND REALITY

People do not always take responsibility for their impacts on wildlife. Several studies demonstrate that natural area visitors, including dog owners, often don't believe they are having much of an effect on wildlife, or assign blame to different user groups rather than accepting responsibility themselves.[6,64,67,68] Some natural area visitors assume that when they see wildlife, it means that they are not disturbing the animals – or worse, that because they didn't see any wildlife, they didn't disturb any.[64]

For example, in Utah, about half of recreational visitors surveyed did not believe that recreation was having a negative impact on wildlife; of those that did, each user group blamed other groups for the strongest impacts.[67] In Austria, 56% of people surveyed at a national park agreed that wildlife is in general disturbed by human activity.[64] However, only 12% believed that they had disturbed wildlife in their visit that day, and dog-walkers ranked their activities as less disturbing than other user groups' activities. When asking different user groups to rate the impacts of overall human disturbance on wildlife, dog-walkers rated the impacts the lowest, at 2.6 out of 5 possible impact points.

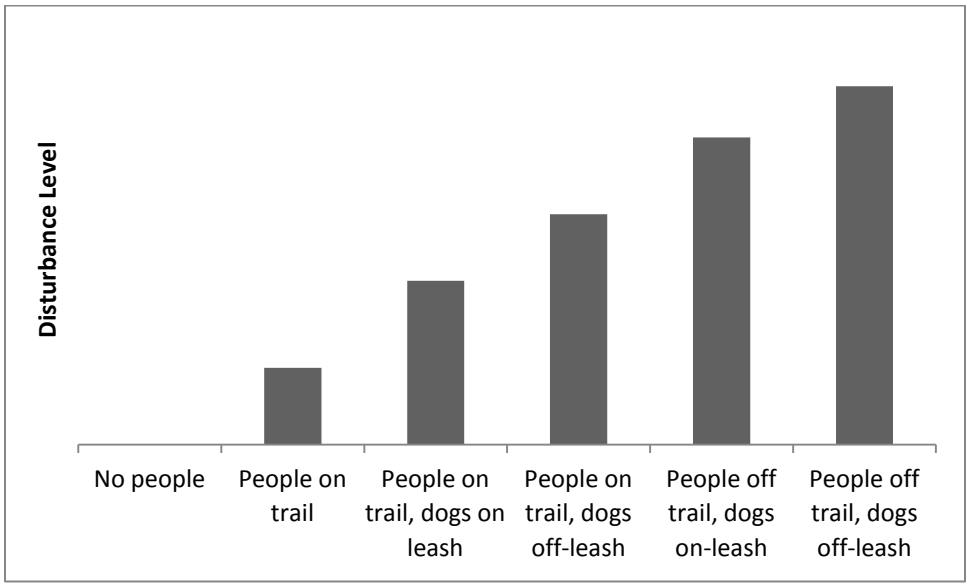
Surveys indicate that many dog owners desire fewer restrictions, while non-dog owners often feel the opposite.[72,73] However dog owners don't always follow the rules, and some dog owners allow their dogs to run free in leash-only natural areas.[32,52,73] In a Santa Barbara study, only 21% of dogs were leashed despite posted leash requirements.[32] And despite regulations and claims to the contrary, dog owners often don't pick up their dog's waste.[6,32] An English study revealed that although 95% of visitors claimed to pick up their dog's waste only 19-46% actually did so, depending on location within the park.[6]

DISCUSSION

In summary, people and their dogs disturb wildlife, and people are not always aware of or willing to acknowledge the significance of their own impacts. Wildlife perceive dogs as predators. Dogs subject wildlife to physical and temporal displacement from habitat, and dog scent repels wildlife with lingering impacts. Dogs disturb wildlife which can induce long-term stress, impact animals' immune system and reduce reproduction. Dogs spread disease to and outright kill wildlife. People with dogs are much more detrimental to wildlife than people alone; off-leash dogs are worse; and off-trail impacts are the highest (Figure 1).

Urban wildlife is subjected to many human-induced stressors including habitat loss, degraded and fragmented habitat, impacts from a variety of user groups, roads, trails, infrastructure, noise and light pollution.[26] These stressors will increase with population; from July 2014 to 2015 the Portland-Vancouver metropolitan region added 40,621 new residents.[43] Current population in the region stands at 2.4 million, with another 400,000 residents expected over the next 20 years.

Figure 1. Conceptual illustration of the relative impacts on wildlife due to people without and with dogs.



Among medium to high density cities, Portland currently ranks second in the total area covered by parks at nearly 18%, and also second in the number of park acres per resident.[25] Of 34 park providers in the Portland region, all but four allow dogs in most or all of their natural areas, typically on-leash; more than two-thirds also offer dog parks or off-leash dog areas (Table 1 at end of document).

Wildlife conservation is not the only valid reason to preserve natural areas. Park providers must weigh the trade-offs between wildlife, habitat, water quality and recreational values. But when considering different types of public access in a natural area, it is important to understand that the research is clear: people with dogs substantially increase the amount of wildlife habitat affected and are more detrimental to wildlife than people without dogs.

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Table 1. Park providers' dog policies in the greater Portland, Oregon metropolitan area.

Parks provider	No dogs allowed	Some parks allow dogs	Dogs allowed	On-leash	Free to roam	Off-leash areas or dog park
Audubon Society of Portland	X					
City of Beaverton		X[2]		X		X
City of Cornelius			X	X[3]		
City of Durham			X	X		X
City of Fairview		X[4]		X		
City of Forest Grove			X	X		X
City of Gladstone			X	X		X
City of Gresham			X	X		X
City of Happy Valley			X	X[5]		X
City of Hillsboro			X	X		X
City of Lake Oswego			X	X		X
City of Milwaukie[6]			X	X		X
City of Oregon City			X	X		X[7]
City of Portland		X		X[8]		X[9]
City of Sherwood			X	X		X
City of Tigard			X	X		X
City of Troutdale		X[10]		X		X[11]
City of Tualatin			X	X		X
City of West Linn			X	X		X[12]
City of Wilsonville			X	X		X
City of Wood Village			X	X		
Clackamas County			X	X		X
Clean Water Services (Fernhill Wetlands)	X					

[2] All parks except fountain provided by Tualatin Hills Parks & Recreation District.
[3] Considering off-leash dog area at Water Park.
[4] Dogs on leash allowed at all parks except Salish Ponds (no dogs).
[5] Dogs on leash except prohibited in playgrounds.
[6] All city parks are operated by North Clackamas Parks and Recreation Department.
[7] The City of Oregon City is currently testing off-leash areas in three parks.
[8] Dogs on-leash except prohibited at Foster Floodplain Natural Area, Tanner Springs Park, Whitaker Ponds Nature Park, Riverview Natural Area, and the amphitheater at Mt Tabor Park.
[9] 33 off-leash dog areas.[46]
[10] Most parks: dogs not allowed. Exception: Sunrise Park and large Beaver Creek Greenway, leash only. Considering two more on-leash dogs allowed parks.
[11] Plans for an off-leash area at Sunrise Park.
[12] One off-leash dog area: field near parking lot at Mary S. Young Park. Off-leash dogs were identified as an issue by parks board.

Parks provider	No dogs allowed	Some parks allow dogs	Dogs allowed	On-leash	Free to roam	Off-leash areas or dog park
Federal / State (Sandy River Natural Area)			X[13]	X	X	X
Metro		X[14]				
N. Clackamas Parks & Recreation			X			X
OR Department of Fish and Wildlife			X	X[15]	X	X
OR Parks & Recreation Department			X	X		X
Port of Portland		X[16]		X		
The Nature Conservancy	X					
The Wetlands Conservancy			X[17]	X	X	
Tualatin Hills Park and Rec. District		X[18]		X		X
U.S. Fish & Wildlife Service	X					
U.S. Forest Service[19]			X	X	X	X

[13] Leashes required only on/near Confluence Trail and in parking area. Leash-off everywhere else. Region's largest off-leash area, and heavily used.

[14] Metro does not allow dogs except for service dogs, leashed dogs on regional trails, Broughton Beach, boat ramps and properties managed by others through intergovernmental agreements that are integrated into larger parks where leashed dogs are allowed (e.g., Forest Park).

[15] All dogs must be on leash, except while hunting during seasons authorized on Sauvie Island Wildlife Area, or pursuant to a valid "Competitive Hunting Dog Trial Permit" or "Sauvie Island Wildlife Area Individual Dog Training Permit."

[16] Includes Vanport Wetlands and mitigation sites. No dogs allowed except Government Island State Recreation Area (leased to Oregon Parks Department).

[17] No formal policy.

[18] Dogs allowed on-leash except Tualatin Hills Nature Park and Cooper Mountain Nature Park.

[19] Refers specifically to the Sandy River Delta, owned and administered by the National Forest Service, Columbia River Gorge National Scenic Area.