



# Oregon

Kate Brown, Governor

## Department of Fish and Wildlife

West Region

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February 26, 2016



Olena Turula  
Metro  
600 NE Grand Avenue  
Portland, OR 97323

Re: ODFW Comments on Tualatin Mountains Natural Area Metro's Recommended Alternative

Dear Ms. Turula,

Thank you for the opportunity to provide input on the future management of the Tualatin Mountains Natural Area (TMNA), specifically Metro's proposed Recommended Alternative affecting the Burlington Creek Forest, Ennis Creek Forest, McCarthy Creek Forest, and North Abbey Creek Forest properties. The Oregon Department of Fish and Wildlife (ODFW) recognizes Metro secured the properties as a result of voter-approved bond measures and is tasked with protection and conservation of natural resource values while providing some level of recreation and other public use benefits. In accordance to our mission and authorities, ODFW has reviewed Metro's current proposal for the TMNA and offers the following comments and recommendations:

### Comments:

Habitat loss, degradation, and fragmentation is the primary threat to Oregon's fish and wildlife. Invasive species, degradation of water quality, barriers to movement, and anthropogenic caused disturbances and hazards are additional challenges. Trails fragment habitat, are vectors for invasive species, and can increase sedimentation, negatively affect water quality. While there are benefits to providing access to nature, human presence and recreational trail development can have adverse effects on wildlife by increasing stress/reducing fitness, disrupting breeding and foraging behaviors, and increasing risk of direct mortality and illegal collection. Amphibians are particularly sensitive to changes in micro-habitat conditions and vulnerable to direct mortality and illegal collection. It has been documented that amphibians can get trapped in ruts created by off-road bike tire tracks, causing them to get run over or making them more vulnerable to predation and illegal collection.

All four TMNA properties lie within Oregon Conservation Strategy (OCS) Conservation Opportunity Areas and provide fish and wildlife resource values of interest to ODFW. The Burlington Creek Forest (BCF) tract is of particular interest to ODFW because of its proximity to the 417-acre Palensky (a.k.a. Burlington Bottoms) Wildlife Mitigation Area managed by ODFW. Palensky provides important habitat for a variety of wildlife species include migratory songbirds,



waterfowl, pond-breeding amphibians, and native turtles. Red-legged frog are a target wildlife species and are monitored annually as part of the mitigation plan for the Palensky Wildlife Mitigation Area. Even though separated by Highway 30 and Burlington Northern railroad lines, seasonal movements of native amphibians including red-legged frog have been well documented between Palensky and the BCF tract. Movements are considered significant and predictable based on observations of live and dead animals recorded since acquisition of the Palensky site in 1991. It appears that the BCF tract provides important foraging and over-wintering habitat for amphibians breeding at Palensky, in particular red-legged frogs. For example, during a 20-minute period on one night in 2014, 46 red-legged frogs and 3 northwestern salamanders were observed crossing Highway 30 during a heavy rain event. This count was made standing opposite Burlington Creek (Beilke pers. comm. 2015). At the same location in 2015, 140 red-legged frogs were observed moving from BCF to Palensky during a single survey period. Red-legged frogs are on Oregon's Sensitive Species List (ODFW 2008), are classified as "Nongame Wildlife Protected" (OAR 635-044), and are Strategy Species in the OCS (ODFW 2006, 2016 *under review*)

ODFW is concerned that proposed trail development in BCF may negatively affect red-legged frogs and other native amphibians that regularly move between Palensky and BCF. ODFW is also concerned trail development on the generally steep slopes of the BCF tract may result in increased soil erosion and sedimentation into Burlington Creek and the numerous seeps, springs and unnamed tributaries present on the property. While ODFW expects wildlife in general to benefit over the long-term from Metro's planned forest management prescriptions aimed at increasing tree growth and developing mature / late-successional conifer forest characteristics (e.g., multi-layer tree canopy, snags and down wood), we are unsure if these actions will off-set negative effects likely to result from trail development (e.g., habitat fragmentation) and resulting increased human presence (e.g., disturbance).

#### **Recommendations:**


1. Avoid / Minimize construction of new trails and other infrastructure, especially in areas of high quality habitat. Utilize existing roads, trails and other right-of-ways (e.g., power-line corridors) whenever possible to reduce additional habitat fragmentation. Minimize the extent (length and width) of new trail and road.
2. Site new trails and other infrastructure away from streams, including headwater streams (perennial or intermittent). Recommended buffer widths are to be developed on a site specific basis and depend upon site characteristics (e.g., soil, topography), but generally ODFW recommends trails be sited at least 100 m from the 100-year OHW mark of streams, including intermittent and non-fish bearing streams.
3. Avoid / Minimize stream crossings by trails and roads. When crossing streams, use bridges or other designs that do not constrain the stream channel or impede fish and wildlife movement. Consider climate change in crossing designs.



4. Improve existing trails and stream crossings as necessary to improve/protect stream flow and riparian area function, water quality, and fish and wildlife movement. Decommission trails and roads whenever possible.
5. Select trail designs that minimize soil erosion and trail rutting, discourage access / use by amphibians and reptiles, and/or allow wildlife movement underneath trails at designated locations.
6. Implement seasonal trail closures to protect priority wildlife species, e.g., during the peak of amphibian activity (breeding season).
7. Survey / Monitor wildlife presence and habitat use patterns to inform trail siting, habitat management practices, and management of public access (e.g., possible seasonal trail closures).
8. Avoid and minimize direct mortality of fish and wildlife species present at the time of project construction, in particular species or age classes thereof that are not able readily move out of harm's way (e.g., amphibian larvae, aestivating turtles, nestling birds). Conduct vegetation management with wildlife in mind (e.g., nesting birds). Use exclusion techniques to keep wildlife out of active work zones. Conduct preconstruction wildlife surveys to locate wildlife. Note: an ODFW Fish Salvage Permit and/or an ODFW Wildlife CHTR Permit may be needed to facilitate avoidance / minimization of direct mortality to fish and wildlife that may be present.

We appreciate the opportunity to review Metro's proposed plans for the Tualatin Mountain Natural Area. If you have any questions or need additional information regarding ODFW's comments or recommendations above please contact me at [susan.p.barnes@state.or.us](mailto:susan.p.barnes@state.or.us) or (971) 673-6010.

Sincerely,



Susan P. Barnes  
Regional Conservation Biologist  
West Region

Cc: ODFW (Don VandeBergh, Tom Murtagh, Mark Nebeker, Sue Beilke)