

21 December 2008

RE: Harmony Road Project Expansion and Sunnybrook Boulevard Extension Project,  
Milwaukie, OR

Clackamas County Board of Commissioners, Policy Review Committee, and Project Advisory Committee,

As trained botanists and ecologists, it is our biological evaluation that the proposed Harmony Road Project Expansion and Sunnybrook Boulevard Extension Project would result in the destruction of critical oak savannah and woodland habitat within the North Clackamas District Park (Three Creeks Natural Area). Of special concern is the presence of “Legacy Oaks”: oaks whose age predates European colonization of the Willamette Valley and exhibit characteristics as defined by the Legacy Oaks Task Force. Such oaks rank as high-priority habitat for conservation and restoration efforts for the following reasons:

**Ancient legacy oaks are the most valuable and are also the most vulnerable aspect of the North Clackamas District Park.** The Harmony Road Project Expansion and Sunnybrook Boulevard Extension Project threaten the most massive of the legacy oaks, which grow on the northern edge of the District Park on the slope and adjacent to the North Clackamas Aquatic Park parking lot. The largest oaks are estimated to be at least 200 years old and likely significantly exceed that age (age estimates based on ring counts of cores taken from two oaks on the same property in accordance with standard, dendrochronological protocol). We applaud efforts to save the so-called ‘heritage oak’ along Harmony Road. However, the ancient oaks just on the other side of the asphalt that the project is likely to either destroy or adversely affect are larger or as large as this.

The legacy oaks adjacent to the south end of the Aquatic Park parking lot are among the largest in the Metro area and represent a critically compromised natural resource in Clackamas County. These massive trees exhibit the statuesque, open-grown form that indicates that this area was once part of the oak savannah ecosystem prevalent before European settlement. Their multi-stemmed growth habit is another clue that they date back to the time when frequent fires, set by Native Americans to manage oak savannahs, occasionally top-killed an oak and allowed it to resprout. These legacy oaks represent a rare living link to our Pacific Northwest heritage.

**Development further threatens regionally endangered oak habitat.** Less than 5% remains of the 1 million acres of oak savanna and upland prairie that blanketed the Willamette Valley at the time of European settlement. While the 89 acres of the North Clackamas District Park support many different kinds of high-quality habitat, the area to be impacted by the Harmony Road Project Expansion and Sunnybrook Boulevard Extension Project is one of the only representations of the rare oak savanna habitat. Destruction of the ancient legacy oaks adjacent to the Aquatic Park parking lot will further endanger this ecosystem.

**Protect unusual ecosystem complexity and diversity within the Park.** The North Clackamas District Park represents unusually complex stand structure indicative of an important transition between upland, lowland, and riparian ecosystems. The open-grown legacy oaks, once part of an oak savanna on the upland, transition to a woodland of impressively large oaks, which are among the biggest in the metro area but are nonetheless dwarfed by the upland legacy oaks. The

woodland grades into more open seasonal wetlands graced with mature ash and red alder, as well as enormous cottonwoods. More closely grown oaks, typical of gallery forests commonly found in riparian areas, thrive in the seasonally wet land near the railroad berm. Lush red cedar and large Pacific yew stand on the cooler slopes on the southern edge of the parcel. This landscape-level diversity is rarely seen within such a relatively limited area, and should be protected to sustain urban ecological function.

**Native wildlife depends on this urban refuge.** As oak savannas and woodlands give way to development in the Willamette Valley, several plant and animal species associated with or dependent on these habitats are declining, or are listed by state and federal governments as sensitive, threatened, or endangered. Northwest native peoples relied on oaks as an essential food source, and acorns remain indispensable for the survival of local wildlife. Indeed, while on the site we observed three species of raptor and a Garter snake as well as coyote, beaver, and woodpecker sign, evidence that wildlife continues to depend on this urban refuge. The mature, large-diameter oaks on the northern edge of the Park are an essential structural element that are preferred as resting places for raptors and other predators, and support a diversity of epiphytic ferns, lichens, mistletoe, and insects that are consumed by dozens of bird species.

We observed rare large oak snags (dead oaks) immediately downhill of the site of the Harmony Road and Sunnybrook Boulevard projects, in an area that we understand could be filled for a retainer wall. Large diameter oak snags are becoming particularly scarce as habitat degradation usurps more and more of the valley, and should be protected as they are of paramount importance for home and forage of numerous bird, salamander, and small mammal species.

**Oaks protect permanent wetlands from degradation.** The Harmony Road and Sunnybrook Boulevard projects will degrade a permanent wetland immediately down slope of the proposed road building by removing large oaks above the wetland. The wetland is indicated by year-round standing water, as well as skunk cabbage (*Lysichiton americanum*), a wetland-obligate plant. Construction activities will negatively impact the wetland by markedly increasing erosion and debris flow. Expansion of impermeable surfaces such as asphalt and concrete will further degrade waterways by increasing runoff and the scouring force of rain, and will also funnel motor oil, antifreeze, and other pollutants directly into waterways or associated swales. The legacy oaks immediately upslope of the wetland help trap pollutants from the nearby parking lot, mitigate the scouring force of runoff, and decrease sedimentation. The wetland is part of the Mt. Scott Creek and Kellogg Creek watersheds in which migrating Coho and steelhead salmon, as well as resident cutthroat trout, were found in this year's stream survey.

**High-quality habitat already responding to restoration.** The relict native habitat found in the North Clackamas District Park is an excellent and worthwhile candidate for restoration. We were surprised to see so many native plants associated with oak communities still intact, including Oregon ash, western hazelnut, dogwood, Indian plum, oceanspray, serviceberry, thimbleberry, ninebark, snowberry, Oregon grape, trailing blackberry, and vine maple, many of which are important wildlife shrubs. Native herbs and flowers that have largely been extirpated elsewhere within the city still prevail on site, and include licorice fern, camas, sword fern, strawberry, fringecups, and buttercups. Many of these native plants were only recently uncovered from underneath tangles of invasive Himalayan blackberry and ivy by the efforts of dedicated volunteer restorationists. The significant component of native understory vegetation at this site helps suppress weeds, and supports ecological function and resiliency. Because of the inherent high-level function at this site and the impressive response to ongoing restoration

efforts, the entirety of the North Clackamas District Park presents a highly worthwhile opportunity for urban lands conservation and protection.

**North Clackamas District Park should be protected as one of the largest greenspaces within a network of interdependent open spaces.** Oak conservation and restoration in North Clackamas District Park benefit citizens far from the Kellogg Creek and Mt. Scott Creek watersheds. Protection of oak habitat within these watersheds is paramount to sustaining the long term health of other oak habitats through ecological connectivity. A healthy network of urban streams, and the trees that protect them, is also essential to water quality, flood control, enhanced property values, and urban quality of life throughout the Metropolitan Greenspaces system. The legacy oaks that grace the northern edge of the District Park are part of one of the area's largest public greenspaces, and should be protected for their notable ecological and social value for generations to come.

**Rare opportunity for research, teaching, and recreation.** Native Americans, early pioneers, and modern Oregonians alike revere oaks as our cultural and eco-regional heritage. Urban patches of these habitats provide a rare link with our past, and offer valuable opportunities for school field trips, community service collaborations, education and research, recreation, and solace. The Park already has a history as the site of successful collaborations between local stakeholders, including neighborhood associations, the City of Portland, the Natural Resources Conservation Service, Friends of Trees, Friends of Kellogg and Mt. Scott creeks, and the Tsunamis volunteer restoration group. The ancient, massive legacy oaks at the north edge of the North Clackamas District Park represent a rare living link to our Pacific Northwest heritage, and should be protected as a valuable educational and cultural resource.

The North Clackamas District Park presents a highly worthwhile opportunity for urban lands conservation and protection. Please consider incorporating the following provisions in management of the North Clackamas District Park:

**Officially designate the North Clackamas District Park as high-priority habitat.** Permanent protection provides for watershed health and wildlife refuge, and offers unique opportunities for education and recreation. To maintain the Park's high quality ecological function, please consider making habitat conservation a guiding priority in land use decisions. We suggest that recreation opportunities be targeted towards hikers, with facilities improvements limited to erosion control on pre-existing paths and installation of elevated trails over seasonally wet or fragile areas. We caution against bike use, as bikes can spread weeds, markedly increase erosion, and stress wildlife. We also discourage installation of restrooms, playground equipment, or picnic tables, as these facilities detract from the rare native character of this park. Interpretative placards that highlight the exemplary ecological and cultural heritage of the park would be welcome.

**Provide a portion of project funds to support further restoration.** Native habitats are already responding to ongoing restoration efforts. Committed stakeholders such as the citizen restorationists have invested significant time and finances of their own to realize these accomplishments. Clackamas County support is needed to further restoration successes. The Park is also an excellent site for applied education opportunities much desired by local schools and other organizations; the County could support this use through the purchase of gloves, tools,

and native plants. There is already interest from Professors of Restoration Ecology at Oregon State University to study this site as a class project.

We realize that the proposed Harmony Road Project Expansion and Sunnybrook Boulevard Extension Projects are designed to alleviate traffic congestion along the Harmony corridor. However, with all demographic analyses of the Willamette Valley projecting a marked increase in population in the near future, we question both the effectiveness and the wisdom of addressing traffic issues in the short-term at the expense of public owned, irreplaceable, and rare natural resources. The county has the unique opportunity to provide both leadership and innovation in civic conservation. We urge you to protect the North Clackamas District Park legacy oaks and oak habitats as part of our local natural heritage and as an important step towards preserving the legacy of this endangered ecological community.

Thank you for your consideration.

Dominic Maze, Botanist

Olivia Duren, Vegetation Ecologist