

# **Tualatin River National Wildlife Refuge General Scoping Comments Summary for the Comprehensive Conservation Plan**

Prepared for

**U.S. Fish and Wildlife Service**

Prepared by

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February 4, 2011

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## INTRODUCTION

This document summarizes comments that were received during the scoping period for the Tualatin River National Wildlife Refuge (TRNWR) comprehensive conservation plan (CCP) and that were not received directly during the agency or public scoping meetings. During November and December 2010, TRNWR held one agency and two public scoping meetings to solicit comments concerning development of the CCP. Comments received at those meetings are summarized in separate reports. The comments summarized in this report were received via e-mail, postal mail, phone calls, and personal communications.

Each comment submittal (i.e., a letter, e-mail, etc. submitted by a single commenter) was assigned an identification number and carefully reviewed for substantive elements. Each substantive element was separated out from the overall submittal as a comment. In total, 114 commenters submitted 277 substantive comments. Copies of all original comment submittals are on file with the refuge.

A set of themes emerged from the comments. Comments were organized by those themes and are presented in Table 1. Identical or very similar comments were summarized and are recorded in Table 1 as a single comment.

Because refuge planning and decision-making is not a voting contest, the number of people (commenters) who made the same comment has not been tabulated or recorded in this report. However, refuge management decisions can be influenced by substantive and thoughtful comments. Issues that generated high public interest, such as hunting and wildlife and habitat management, are more likely to receive a greater level of planning attention.

As part of the scoping process and in addition to soliciting comments through the above-mentioned avenues, the refuge solicited feedback through the use of comment forms. The forms included space to respond to five specific questions:

1. Why is the refuge special to you?
2. What activities do you engage in when you visit the refuge?
3. Referring to the preliminary issues identified in the planning update (see website for more information), which are most important to you? What are concerns or issues you would like to be addressed?
4. What suggestions do you have to address your issues or concerns?
5. What is your vision for the future of Tualatin River Refuge?

The general responses to these questions have also been included in Table 1. The responses to question number 4 have been incorporated into the substantive comments grouped by theme.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

<b>Comments</b>
<b>Wildlife and Habitat Management</b>
The refuge has significant gaps in habitat and several habitat “bottlenecks.” Management designs/decisions should reduce fragmentation and non-connective habitat.
There should be areas of wildlife habitat with minimal to no disturbance from humans. For example, it is critical that turtles are not disturbed when they are nesting, basking, or in their overwintering habitats. Painted turtles and pond turtles nest in uplands, typically from mid-May through early August and hatchlings typically stay in the nest through late summer, fall, and winter.
Oak woodlands and oak savannah habitats are important for turtle nesting and overwintering. Provide upland nesting habitat in the oak prairie away from public use areas. Oak woodlands, riparian, and coniferous forests can provide overwintering habitat for pond turtles as well as movement corridors.
As wildlife habitat in the urban area is lost or becomes more fragmented, the importance of each remaining natural area and their connectivity increases. Developing effective habitat connections between key habitat core areas in the region, including lands protected by the refuge, is an essential step in protecting regional biodiversity.
We encourage the refuge to let restoration and management decisions be guided predominantly by the goal of re-establishing appropriate native habitat types and ecosystems (i.e., those that were historically present at the refuge). Native wildlife populations will be best served by this goal rather than by managing specific tracts for a particular wildlife species.
The refuge should not be managed to provide habitat for geese, but rather should be managed to re-establish native ecosystems in the urban area.
Wapato Lake should be managed primarily for waterfowl benefits.
Do not only design for migratory waterfowl. Have some brushy areas for other species.
Plant crops to attract geese away from areas experiencing crop deprivation.
Look at the habitat restoration success stories of other refuges (i.e., Hart Mountain, Warner Lakes, Tualatin River, Fern Hill Wetlands, and Jackson Bottom Wetlands) when planning for the Wapato Lake Unit.
Avoid over-management; wildlife that currently lives there needs the protected and peaceful lands without the disturbance of too much management and change.
Do not use fire as a management tool—too close to urban area.
Mowing/disking and crop management are positive management tools.
Deer overpopulation could be managed with a controlled hunt.
Elk and deer management should include provisions for population controls/reductions to avoid wildlife damage conflicts on adjacent lands.
Development of water control structures to create/enhance wetland habitats for waterfowl and other wildlife species can directly impact fish passage and potentially violate State law. Refuge plans should recognize Oregon Statutes and commit to maintaining fish passage.
The challenges of maintaining wildlife and wildlife habitat associated with high public use areas should be anticipated and addressed in the CCP.
The refuge has a unique opportunity to promote wildlife movement across the landscape by implementing strategies for movement between refuge units and by creating movement links to surrounding landscape features.
A healthy ecosystem is threatened by the local farming practices of pesticide use and non-organic fertilizers. Any cooperative farming should not allow such practices.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Increasing bird and bat populations is an excellent way to control mosquito populations.
Avoid the use of pesticides and chemical fertilizers in all but extreme circumstances.
Engage the organic farming community in cultivating refuge lands, where appropriate.
Maintain buffer zones.
Avoid mono-crops where refuge lands are cultivated.
At least one-third of the Wapato Unit should be managed for shorebirds ( <i>Calidris</i> , <i>Tringa</i> , <i>Pluvialis</i> , and <i>Charadrius</i> genera and <i>Phalaropus tricolor</i> ).
Portions of the Sherwood Units should be managed for shorebirds.
Portions of the refuge should be managed for western meadowlark breeding and wintering habitat.
Purple martin houses should be set up at Wapato Lake.
Western bluebird nest boxes should be placed at Wapato Lake.
No part of the refuge should be open to livestock grazing because it degrades and destroys habitat.
Great care should be exercised with respect to mowing fields during the bird breeding season.
Manage for wildlife first.
Wapato Lake should be premier bird habitat.
Restore the wapato plant in the Wapato Unit.
The refuge could provide hundreds of acres of untreated wheat and/or other short nutritional grazing grasses for geese. The economic importance of geese can be supported by the refuge by providing good forage sources.
Cannot turn back the clock and make habitat like it was 200 years ago. Develop a few areas where special plants with special needs can grow. The remainder of the refuge should be managed for cash crops and critical spring food supply for migrating birds.
Do not set land aside for birds only. It discourages short-stopping geese from migrating their complete distance (to California) and supports crop depredation by encouraging geese to stay.
<b>Wildlife and Habitat Restoration</b>
Consider long-term protection and conservation of western pond turtles and western painted turtles. They need forested and upland prairie habitat.
Wildlife habitat restoration is the most important issue. Appropriate goals and measures to restore and maintain appropriate, ecologically-functioning native habitats at the refuge must be identified.
The floodplain that supported oak woodland should be restored and managed for that habitat type and not for more elk or geese habitat.
The refuge should seek to restore floodplain units that historically supported a mix of riparian, emergent, and wet-prairie wetlands, with those wetland habitat types by re-establishing, where possible, the natural hydrology and disturbance regimes important to maintaining these habitats and their functions.
We support the restoration of streams and off-channel wetlands on the refuge guided by the philosophy of native ecosystem restoration; appropriate restoration of these habitats should logically support salmon recovery as well as other native fish recovery.
Restore habitat for multiple species as well as native plants/cultural heritage (e.g., wapato, camas, cattails).

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Use native plants and seeds to gradually replant/restore Wapato Lake sections to restore the area to habitat as close to native as possible.
Restore native birds with the use of bird nest boxes.
When restoring lands, consider refurbishing small pieces of land at a time. Overzealous removal of mature trees/shrubs (even blackberry) eliminates habitat for decades while seedlings establish and grow. Restoration efforts could include making use of state prison inmates to grow needed plant stocks.
State and regional habitat and species plans (e.g., Oregon Conservation Strategy) should be used to best focus habitat restoration efforts toward the most critical species and habitats and to link efforts on the refuge to priority actions on the regional landscape.
Reforestation of river banks will be important for in-stream habitat.
Restore the muskrats to the Tualatin River ecosystem; they are a gauge of ecosystem health.
Use watershed modeling and habitat mapping to guide re-establishment of natural ecosystem processes and functions for Wapato Lake and the refuge as a whole.
I would like to see more native prairie, native plants, and native butterflies.
Restore the historic stream channels, floodplains, and wetlands. Restore beavers to manage the water instead of relying on man-made structures and human decisions on water releases.
Restore native plants.
Restore/re-establish Oregon white oak savannah ecosystem.
Restore Wapato Lake.
<b>Special Status Species</b>
Develop a state-of-the-art salmon and steelhead hatchery to supply fish to Gales Creek and other Tualatin River tributaries.
Special emphasis of research and monitoring should be given to special status species.
<b>Non-native and Invasive Species</b>
The more the refuge seeks to work “with” the land to restore historic habitat types and disturbance regimes (primarily appropriate flood regimes), the greater should be its success suppressing non-native species and recovering natives.
Drain Wapato Lake in the summer to help prevent excessive mosquito populations.
Feral cats, nutria, and other fast and mass-reproducing species probably need to be trapped and destroyed in order for natives to recover.
The need to control plant and animal invasive species is a significant, long-term challenge that should be addressed in the CCP.
The use of pesticides poisons a diverse community of life by disrupting the food chain with negative and potentially permanent impacts.
Priority should be given to eradicating bullfrogs first; secondary priority should be to eradicate nutria.
Advance plans should address appropriate responses to human and/or wildlife health threats in the event of mosquito-borne disease outbreaks.
Prepare a comprehensive mosquito monitoring program.
Prepare a mosquito management plan that incorporates integrated pest management principles.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Allow County Mosquito Control staff access to the refuge to conduct surveillance activities and research.
Use local monitoring data on mosquitoes and diseases to determine threat threshold levels and appropriate refuge response.
Remove invasive species via trapping of furbearers by knowledgeable, licensed trappers. Nutria ruin otherwise productive habitat.
Use deep water in Wapato Lake to manage invasive plants.
<b>Climate Change</b>
The potential effects of climate change should be considered in the development of the CCP.
The CCP should outline a plan to inventory and monitor climate change–related variables and trends, including a description of the specific indicators to be monitored.
The CCP should address climate change in combination with ongoing environmental threats and stressors.
The CCP should outline a strategy for improved habitat connectivity in light of climate change and its associated shifts of habitat suitability.
The vision statement should acknowledge the important role climate change will play in shaping the future conditions of TRNWR and that the refuge will strive to promote ecosystem resiliency.
In consideration of climate change and geographic/ecosystem settings, we recommend describing current and historic temperature and precipitation, observed trends, and projected future conditions.
The CCP should describe potential climate change impacts to priority species and their habitats.
<b>Water Quality</b>
Areas within the Tualatin River account for three of seven river locations in Oregon that are rated “very poor” (Oregon Water Quality Index 2007), including the reach along Scholls Ferry Road. A plan should be drafted to address the negative effects from the polluted river.
I strongly support efforts to manage water quality of Wapato Lake including the potential for blue-green algae blooms.
I am concerned with the financial costs and health problems passed on to downstream users who must deal with the inadequate water quality of lake water released to the river.
Water quality and quantity will be important for fish habitat concerns.
Conduct a basic water resources assessment for TRNWR including an inventory of water rights, quality, and quantity.
During the CCP process, consider how USFWS will address various water quality issues and comply with water quality criteria set forth in federal and state standards.
Restoring the Wapato Lake Unit and appropriate Sherwood Units to wetlands managed to mimic the natural hydrology, including restored wetland vegetation on which fertilizers are only applied when needed and at carefully controlled agronomic rates, would result in discharges that qualify as “natural” and would simplify water quality questions.
TMDL allocations for the Tualatin River include temperature, total phosphorus, dissolved oxygen, bacteria, and harmful algae blooms. The CCP should include strategies for compliance with these load allocations.
<b>Water Rights</b>
Acquire, under state law, adequate water rights to fulfill refuge purposes.
Acquired water rights are a valuable commodity and the refuge should use them to the best advantage of local natural ecosystems and not divert water to other uses.

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The refuge should be aware of and comply with state water rights laws and regulations, including water rights/permits requirements, use of groundwater, and groundwater well abandonment requirements.
<b>Public Use – General</b>
Plan for and manage public use to minimize adverse effects upon wildlife and wildlife habitat.
Ensure use of refuge is flexible to allow for needed changes in the future. For example, waterfowl hunting blinds might benefit from relocation following a few years of experience.
Close important wildlife areas on the refuge to hunting and other public uses to provide wildlife sanctuary, and/or nesting, overwintering, basking, and feeding areas for sensitive species such as western pond and western painted turtles.
If hunting is allowed on the refuge, non-hunters should have equal access opportunities in terms of time (equal number of non-hunt days), facilities (dual-purpose blinds), and area (hunt area). Non-hunters should have to comply with the same rules and regulations, and pay the same fees.
Trails on the Wapato Unit should be open year-round and access large portions of the unit. If hunting is allowed, allow public access to non-hunted areas on hunt days.
Provide inexpensive public use opportunities for families.
The following uses are not compatible on the refuge: biking, dogs, off-road vehicles, and horseback riding.
<b>Hunting</b>
Allow hunting for deer, elk, turkey, upland game birds, and/or waterfowl on the refuge.
Allow hunting on the Wapato Unit.
Allow hunting on the Sherwood Unit.
Potentially allow for deer and/or elk population control/reduction on the refuge. Deer and elk hunting should be allowed using bow and arrow or shotgun only, and should include hunting opportunities for youth.
Hunting should be allowed with as few restrictions as possible.
If allowed, hunting should be appropriately limited or very controlled. For example, consider limiting the numbers of hunters allowed daily to avoid overcrowding and limiting the days of the week open to hunting (e.g., to Monday, Wednesday, and Friday or Sunday, Wednesday, and Saturday) to allow game to rest and other visitors to enjoy the refuge. Consider access on a first-come, first-served basis, or through use of an online lottery draw system, assigned blinds, and check-in/check-out system for waterfowl hunting like that used at McNary and Umatilla NWRs. For youth hunts, allow youth to hunt all day, but adults only to hunt beginning at 11:00 a.m. or noon.
Consider modeling the management, monitoring, and control of the refuge's hunting program after that at Sauvie Island Wildlife Area.
Carefully site waterfowl hunt areas and blinds considering prevailing wind and weather directions.
Hunting on the Wapato Unit would generate economic benefits for Gaston.
Hunting is a current and historic use in and around the refuge units. Not allowing hunting further reduces the already limited hunting opportunities in the local area.
There are too few public hunting opportunities in the Willamette Valley and near the metro area. Need more opportunities closer to home.
Hunting on your own private land or at a duck club is too expensive for many people.
Provide hunting opportunities for youth. Hunting would benefit interaction of youth with wildlife and the environment.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Hunting preserves society's hunting/gathering skills and provides individuals/families with a green method of providing food.
Hunting on the refuge could reduce numbers of resident Canada geese and wildlife impacts on surrounding private lands.
Allow hunting on parts of the refuge and maintain other parts as wildlife sanctuary with food and water similar to that at Sauvie Island Wildlife Area.
Hunting and other refuge uses can co-exist. Provide a quality hunting program similar to that provided at Umatilla NWR.
Properly managed hunting and urban areas can co-exist, as they do at the Sauvie Island and Fern Ridge wildlife areas. It seems to be working out even though there currently are private duck clubs operating near the refuge and close to residential areas.
Allow hunters who volunteer their time (e.g., 20 hours service per year) to earn the opportunity to participate in special, limited-entry hunts on the refuge (e.g., for waterfowl, wild turkey, and archery deer hunts).
Hunters are strong conservationists, key community members, and generally motivated and concerned environmental stewards. Waterfowl hunters care about ducks and geese and contribute time and money to preserve and enhance their habitat and populations. Hunters may be willing to help plan hunting areas and build trails and blinds.
Hunters have significantly contributed to the NWRS, including land acquisition and wetlands protection, through conservation organizations, excise taxes, and purchase of duck stamps. Hunters have earned the right to hunt on NWRS lands.
Waterfowl and upland game bird hunting can be accommodated without disrupting other refuge users.
Allowing hunting on the refuge could increase participation, ownership, and stewardship for the NWRS, and it would keep hunters happy.
Encourage the tradition of hunting and stewardship of our natural resources.
Hunting is an encouraged and priority use of the NWRS.
Hunting should be limited to use as a tool to achieve specific management objectives. For example, it may be a desirable tool on the Wapato Unit if deer or elk populations grow too large there and cause off-site depredation. Hunting by refuge staff should continue to be a management tool used to control nutria and other invasive species.
Ensure that the public receives accurate information about hunting in the NWRS.
Need to hunt and bear arms in America. Not allowing hunting would be another government takeover.
Do not allow hunting on the refuge.
Do not allow hunting on the Atfalati Unit of the refuge. This unit is a public demonstration area for the NWRS and is regularly visited by families and student groups.
Do not allow hunting on the Sherwood Units of the refuge.
Hunting on the refuge is contrary to the definition of a refuge, that is, a sacred place; a sanctuary; a place of relaxation, peace, and calm; a place which shelters or protects from danger and is inaccessible to an enemy.
Hunting is not compatible in an urban environment. The refuge is too small to safely accommodate hunting. Noise and shot/bullets from hunting on the refuge would adversely affect and potentially pose a safety problem for refuge visitors, neighboring residents and businesses, motorists, cyclists, and boaters. Hunting on the refuge would disturb wintering waterfowl, cause them to tap energy reserves and adversely impact their spring migratory and breeding abilities, and possibly cause them to abandon the refuge area.
Maintain parts of the refuge as wildlife sanctuary and do not allow hunting there (similar to that at Sauvie Island Wildlife Area).

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Do not allow hunting on the refuge. There are already many other places to hunt. The refuge is already surrounded by lands that are hunted for waterfowl and deer, and the refuge needs to provide a safe haven for these animals.
Because surrounding private lands provide ample opportunity to harvest deer, allowing deer hunting on the refuge for population control may not be necessary.
There is inadequate area for deer to find shelter, so the refuge shouldn't be opened to hunting.
Wildlife on the refuge has acclimated to humans; therefore, hunting would not be fair. Hunting on the refuge would be like shooting animals at a zoo.
Hawks, eagles, or other protected species might be shot by hunters, even if accidentally.
No longer a need to provide families sustenance through hunting.
Numerous farmers in the Tualatin Valley acquire income by allowing hunting on their properties. The refuge should not compete with these enterprises.
There is already enough violence against animals.
Allowing hunting would increase litter from beer bottles, cigarette butts, and other trash.
<b>Fishing</b>
Allow fishing on the refuge.
Allow fishing on the Wapato Unit.
Allow fishing on the Sherwood Unit.
Fishing is a current and historic use in and around the refuge units.
If allowed, fishing should be very controlled.
Allowing fishing on the refuge could increase participation, ownership, and stewardship for the NWRS.
Anglers are key community members and generally motivated and concerned environmental stewards.
Fishing is a low-impact use.
Allow fishing like at Sauvie Island Wildlife Area.
Do not allow fishing on the refuge.
Fishing is not as intrusive as hunting, but lost lines and lures can prove lethal for birds and other wildlife.
There is no need to allow fishing on the refuge because there are many other places nearby to fish.
<b>Wildlife Observation</b>
Provide bird watching, including for shorebirds, and other wildlife observation opportunities.
Expand the wildlife observation program.
Avoid over-management and restoring/managing habitat too quickly to ensure that current wildlife and habitat are available now for visitors to enjoy.
Provide wildlife observation areas or blinds, some of which are roofed and accessible year-round, which don't require viewing to the south and into the sun.

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Provide web cam viewing opportunities for refuge areas that are off limits.
Provide shorebird observation opportunities at the Wapato Unit.
Site purple martin houses at the Wapato Unit to provide viewing opportunities.
Access to the refuge is important for visitors to enjoy and appreciate nature and natural resources.
<b>Photography</b>
Provide photography opportunities on the refuge.
Consider changes to the refuge's photo blind to improve access to wildlife and natural lighting.
Relocate the existing photo blind to the south side of the wetlands so that photographers will not be viewing/shooting into the sun.
Construct a new photo blind near the ponds next to Hwy 99W. There is already a path there and highway noise could help conceal photographers.
Decent photographs cannot be taken from an observation deck.
<b>Environmental Education</b>
Provide environmental education opportunities on the refuge.
Provide nature study programs for grade and high school students.
Expand the environmental education program, potentially to include classroom and field study, and multi-session classes.
Expand the environmental education program to include a summer camp for kids (e.g., one-week or four-to five-day camp, four to six hours per day, including a lunch).
Partner with local university to offer environmental education programs, including on-site field study and potentially including an internship component.
Establish a limited-access, off-trail field observation laboratory where school groups, accompanied by a refuge naturalist, could spread out and study soils; conduct vegetation transects; and/or sit quietly and observe nature. Environmental education activities could include those parts of Project Learning Tree or Project Wild. Consider the following on the Atfalati Unit, the area between and wetland overlook and the photo blind or the area north and east of the wetland.
Provide more environmental education programs for older visitors.
Consider use of a refuge salmon and steelhead hatchery for environmental education.
Address climate change and its effects on ecosystems and wildlife through refuge environmental education programs and materials, including brochures and websites.
Add a professional environmental education specialist to the refuge staff to provide program continuity and support continued growth of the program at both the Sherwood and Wapato units.
<b>Interpretation</b>
Provide interpretation on the refuge.
Provide information about refuge trails where the Tonquin Trail meets the refuge (at Roy Rogers Road and at the Visitor Center—although a safe connection to the Visitor Center has yet to be identified).
Use Intertwine, regional trail, and educational signage.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Address climate change and its effects on ecosystems and wildlife through refuge interpretation programs and materials, including brochures, interpretive panels, and websites.
<b>Refuge Access</b>
Provide better/more public access.
Provide public access to the refuge from local/regional trails, including the Tonquin Trail and Tualatin River Water Trail. Consider providing access to all refuge trails via a local/regional trail.
Provide opportunities for walk-in, off-trail exploration, nature study, and wildlife observation on the less developed refuge units, that is, other than the Atfalati Unit.
Provide boating access to and from the refuge and the Tualatin River. This would benefit canoeists, kayakers, anglers, wildlife observers, and other visitors enjoying wildlife-related recreation.
Provide canoe and kayak access to the Tualatin River near Schamburg Bridge at Roy Rogers and Elsner roads. This would provide a needed access point between the Scholls Ferry Bridge and the Highway 99W Bridge. Current access to the river at this point is very difficult due to steep slopes and overgrown blackberries. Alternatively, there may be other acceptable eiver access sites on the Atfalati or Tualatin River units.
Provide walking access to refuge areas that are out of earshot of traffic.
Provide walking access to all areas of the refuge except sensitive areas (e.g., breeding areas).
Develop public viewing access at the Wapato Unit.
Allow year-round access to Wapato Unit.
Provide tours of the Wapato Unit.
Limit automobile access on the refuge.
<b>Public Use Facilities</b>
Provide trails, boardwalks, observation decks, and/or blinds for bird, including shorebird, watching.
Construct designated parking lots with restrooms, as well as blinds for waterfowl hunting. Construct boat ramps on the Tualatin River for waterfowl hunting and for use by other small water craft after the waterfowl season.
Incorporate handicapped fishing access on any boat ramps built on the Tualatin River.
If an auto-tour route is established at the Wapato Unit, include opportunities for people to exit their autos to observe wildlife (e.g., three or four boardwalks/blinds such as those at Anahuac NWR) and to also walk portions of the refuge.
Establish wildlife observation/photography blinds at the Wapato Unit. Blinds should allow close observation/photography of wildlife; allow front-lighting of wildlife; have several, large, closeable openings for lenses/spotting scopes; and include approaches designed not to disturb wildlife (e.g., screened dirt trails or waist-high water). See examples at Cabin Lake Ranger Station and Summer Lake State Wildlife Area.
If waterfowl hunting is allowed, consider construction of dual-purpose blinds to serve hunters and visitors observing and photographing wildlife.
Consider development of an elevated viewing platform on the Wapato Lakebed dike. One option would involve a partnership with the City of Gaston to site a platform adjacent to the Gaston City Park. A boardwalk and disabled-accessible ramp could connect the parking lot and restrooms.
Provide walking/nature trails and associated parking lots on the Wapato Unit. Site some away from the noise and disturbance of Hwy 47. Fern Hill Wetlands and Jackson Bottom Wetlands already provide wetlands trails in the area, so consider establishment of a riparian trail north of Wapato Lake.

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Provide more walking trails, not buildings. Pave walking trails with materials that do not noisily crunch under foot.
Develop a network of trails connecting refuge units with each other, with the Chehalem Ridge Natural Area, and with the Chehalem Valley and Oregon Coast.
Build boardwalks with railings, fences, etc. to allow visitors to closely observe shorebirds without disturbing them.
Provide sheltered rest spots on refuge trails.
Provide a Tualatin River canoe/kayak launch site on the refuge.
Provide paths for use by mountain bikes, except during the waterfowl hunting season.
Provide sites for public outreach.
Consider providing porta potties or pit toilets, especially on the eastside of the Atfalati Unit and at the Wapato Unit. This would benefit disabled and senior citizens, and children and would help avoid pollution by human waste.
Provide bicycle parking and information about refuge trails where the Tonquin Trail meets the refuge (at Roy Rogers Road and at the Visitor Center—although a safe connection to the Visitor Center has yet to be identified). Use Intertwine, regional trail, and educational signage
Do not add picnic tables, plentiful garbage cans, or other “park-like” amenities on the refuge.
<b>Fees</b>
Establish an affordable entrance fee program and use revenues to help support refuge facility and habitat maintenance, staffing, and public outreach needs.
Establish entrance fees so that all visitors share costs.
Establish an entrance fee for the refuge’s Sherwood Units.
Consider waiving entrance and user fees for disabled citizens, volunteers, and visitors arriving via public transportation.
Generate revenue by assessing user fees (e.g., for workshops and educational programs), through sponsorship opportunities, and through the Refuge Friends group actively seeking donations instead of establishing entrance fees.
Consider adding fees for special environmental education programs (e.g., those that include classroom and field study, multi-session classes, and those provided with university partners).
Establish a vehicle-based, day-use fee (with an annual-fee option) similar to that used at Sauvie Island Wildlife Area.
Establish a user fee program for hunting (e.g., \$3–4 per hunter). This would generate revenue for the refuge.
Establish a user fee for roads and observation areas.
Levying fees would subvert access by all people.
<b>Water Management at Wapato Unit</b>
I am concerned about inadequate seasonal water management, especially the recurring winter dike overflows and breaches/leaks.
We are concerned about the unacceptable water quality, including algae blooms, resulting from the inability to drain the lake in a timely manner.
I support breaching the dikes and returning Wapato Lake to a more natural hydrology regime.

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As majority owner of the WID, USFWS is expected to operate the lake within the confines of the Wapato Lake Management Plan.
Minimize any releases from Wapato Lake that are detrimental to the water quality in the Tualatin River.
Adequately budget for and perform necessary maintenance on the facilities at Wapato Lake, including vegetation and rodent control on the dikes and maintaining properly functioning pumps in the pump house and working valves on the outfalls.
Restore the ecosystem services that Wapato Lake can provide water quality protection and improvement, fisheries, and waterfowl habitat.
Consider measures to control flooding issues at Wapato Lake.
<b>Volunteers</b>
The Refuge Friends group members actively volunteer their support of refuge programs, especially restoration, visitor services, and environmental education.
The Refuge Friends group operates Nature's Overlook store. When the Visitor Center is open and the store is not staffed, theft is a concern. Need to provide some method to make the store secure during such times.
Management of purple martin houses at the Wapato Unit would provide volunteer opportunities.
Construction and installation of cedar wood duck boxes on the refuge would be a good youth or scout project.
The Refuge Friends group would like to maintain the cooperative working relationship and strong, positive partnership with the USFWS into the future. The Friends group looks forward to continued participation and engagement with the USFWS through the CCP process.
The Refuge Friends group should actively seek donations to support the refuge.
Partner with local public or nonprofit conservation organizations (e.g., Metro, Audubon, and Tualatin Riverkeepers) to sponsor or conduct refuge field trips.
Establish partnerships with citizens groups only, not with other government agencies like the Department of Agriculture or Clean Water Services.
Refuge might benefit from one or more local advisory boards or citizens committees to provide USFWS with input on management decisions. For example, involve local waterfowl hunters in blind placement, involve local birders with experience in the Willamette Valley in management of shorebirds, and involve members of the refuge-sponsored Tualatin River Photographic Society in placement/management of the photo blind(s).
Partner with federal, state, and/or local public health authorities that have expertise in vector-borne diseases to develop refuge mosquito management program.
Consider partnering with Oregon State Prisons (for inmate labor) or Metro for refuge service projects, like installation of hunting blinds, removal of non-native and invasive species, and propagating and out-planting rare native plants.
Partner with local university to offer environmental education programs, including on-site field study.
It's important to refuge planning, habitat restoration, management, and monitoring to coordinate, collaborate, and actively participate with other natural resource planning and management ventures in the area, including ODFW wildlife areas and wildlife management programs, Metro, neighboring public and private natural areas, statewide Oregon Conservation Strategy, Willamette Synthesis Planning Project, and Portland/Vancouver Area Regional Conservation Strategy.
It's important to work collaboratively to jointly manage a network of functionally connected habitat reserves.
Integrate management of the refuge and other national wildlife refuges in the Willamette Valley into a cohesive, federal-state strategy to meet the foraging needs of wintering geese and reduce damage to private lands.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Partner with state agencies and universities to provide research and monitoring opportunities associated with limited hunting used as a refuge management tool.
Establish/join a collaborative program with other federal agencies, state agencies, conservation organizations, universities, local landowners, and scientists to discern changes in the abundance or distribution of indicator species as a part of a larger effort to better understand, assess the effects of, and respond to climate change.
Engage in landscape-level conservation partnerships (outside refuge boundaries) with Metro and other public and private partners to ensure climate change adaptation actions are developed and implemented at the appropriate scale.
Coordinate planning for the Wapato Unit with the Chehalem Ridge Natural Area.
Partner with others to monitor, conduct research, advocate, and control pollution in the Tualatin River.
Partner with organic farmers for the refuge's cooperative farming program.
Engage the community and establish community partnerships in the rural area near the Wapato Unit.
Partner with Metro and other agencies to allow better access to public lands.
Partner with the City of Gaston to build a wildlife observation platform on the dike adjacent to the Gaston City Park, and a boardwalk and handicapped-accessible ramp connecting the platform to the park's parking lot and restrooms.
Partner with Metro and Tualatin Riverkeepers in the planning, acquisition, development, and management of River access for canoes and kayaks access near Schamburg Bridge or elsewhere on the Atfalati or Tualatin River units.
Partner with Metro regarding the planning, development, and management of their Farmington Bridge and Munger Lane public access properties that lie across the River from the Steamboat Unit.
Partner with Metro and other local governments regarding the cooperative funding, planning, and management of interconnections between the refuge and the Tonquin Regional Trail.
<b>Land Acquisition</b>
Acquisition boundaries should be reviewed to provide the best habitat possible, including consideration of fragmentation and connectivity, regardless of time required to plan for such.
Land acquisition should include a focus on upland habitats. Upland habitats, if purchased, should include both forested and open areas (i.e., upland prairie) that can offer nesting habitat for turtles as well as basking areas for snakes, lizards, and other reptiles.
Consider establishment of a wildlife easement program near the refuge.
The CCP should include a list and description of areas within the refuge authorized boundaries that are currently unprotected as well as a plan for future acquisition and expansion.
Continue land acquisition at Wapato Lake.
Try to acquire more land acreage.
<b>Research and Monitoring</b>
I recommend conducting surveys as well as long-term monitoring in order to fully understand wildlife species needs on the refuge.
Regional research and monitoring efforts will be greatly enhanced if research projects and findings are shared and coordinated with similar activities on refuge properties.
Research, monitoring, and evaluation components should be included in the CCP to assess responses of wildlife to habitat restoration and management actions.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

<b>Off-site Impacts to Refuge</b>
Working with Lake Oswego dam to ensure flow and water temperatures is important.
<b>Other</b>
Ensure that the refuge's CCP process is open and inclusive, and recruits and engages regional experts. The CCP process for Ankeny, Baskett Slough, and Finley refuges is a great model.
Allowing trappers to be involved with the refuge will benefit all parties.
Reserve some open space and a couple of ponds and allow dog training and dog exercising on the refuge. There is very little land in the local area for this use.
Allow shotgun trap shooting on the refuge.
Provide boating opportunities on the refuge.
Restrict the use of large boats on the Tualatin River.
Establish a no-shooting or no-hunting buffer area around the refuge to reduce noise, and protect wildlife and refuge visitors.
Dead wildlife is often seen along Roy Rogers Road and Hwy 99W near the refuge. Provide wildlife crossing signs in these areas.
Allow continued furbearer trapping on the refuge. Regulated trapping can be a valuable wildlife management tool and can be used, for example, to remove invasive species.
Manage refuge similar to Malheur NWR, that is, without hunting or fishing.
Increase refuge funding.
Consider establishing a birding stamp (like a duck stamp) that can generate funding to support birding and habitat projects (e.g., habitat management for shorebirds).
Send a mailer to all Oregon waterfowl hunting license holders about the refuge hunting issue.
<b>Why is the refuge special to you?</b>
It's an amazing resource where wildlife can co-exist in an urban environment.
It's a place where children can bond with nature and experience the complexity and beauty of uncontrolled nature.
Because I live near or have property within the Wapato Unit approved boundary.
It's a safe, peaceful haven for wildlife and people. A refuge for animals where they won't get shot.
Habitat protection and restoration, including wetlands.
Because there are wildlife and there are opportunities to observe them.
Wildlife and habitat educational programs.
It's accessible and close to home.
Patch of wildness close to home and convenient place to enjoy passive recreation, walk, and enjoy wildlife and outdoors.
Walking and other exercise.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Hunting.
Size, hydrology, location along wildlife corridors, relationship to other public resource lands, migratory stop-over, and habitat diversity.
Partnerships with other natural resource planning and management ventures.
Nature study for grade and high school youth.
A place to enjoy nature and the seasons.
Place where birders visit.
Place where volunteers help out.
Unique wildlife habitat for the public to enjoy.
One of the only large blocks of low-lying land in the Willamette Valley managed as a natural area.
It provides grazing opportunities for geese.
<b>What activities do you engage in when you visit the refuge?</b>
Hunting.
Bird watching and other wildlife observation and identification.
Photography.
Walking and hiking.
Canoeing on the Tualatin River adjacent to the refuge.
Attending talks, tours, and other educational offerings.
Plant identification.
Collaborative restoration planning.
Fresh water mussel survey.
Enjoying the scenery.
Relaxation and peace.
<b>Referring to the preliminary issues identified in the planning update (see website for more information), which are most important to you? What are concerns or issues you would like to be addressed?</b>
Habitat restoration.
Protection of riparian areas.
Wildlife corridors.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

Habitat fragmentation.
Habitat diversity.
Wildlife and habitat management.
Cooperative farming.
Problem, nuisance, non-native, and invasive species, including beavers, Canada geese, and mosquitoes.
Salmon and steelhead habitat management.
Use of pesticides.
Water quality and quantity.
Engaging citizens in restoration efforts.
Research, study, and monitoring.
Public use.
Hunting.
Fishing.
Environmental education.
Refuge access.
Fees.
Walking.
Boating.
Community partnerships.
Cultural heritage (e.g., including wapato, camas, and cattails).
Wapato Lake, including water management and flooding.
<b>What suggestions do you have to address your issues or concerns?</b>
<i>These suggestions have been incorporated by theme above.</i>
<b>What is your vision for the future of Tualatin River Refuge?</b>
Refuge is internationally known destination for wildlife and humans where the region's rich resources can be enjoyed both actively and passively.
Refuge is part of a larger urban-rural network that includes riparian and upland, and valley and mountain resources; and visual, aural, and serene habitat.
Research and best management practices are collaboratively shared with partners.

**Table 1.** Summary of Comments Received Outside of Scoping Meetings

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A clean and safe extended area where wildlife exist and are being preserved in as natural a state as possible.
Opportunities are provided for humans to bond, participate in, and become educated about the natural world.
Hope for the co-existence of human and non-human life forms on the planet.
Seeing and experiencing numerous geese, swans, and ducks on the Wapato Unit.
Network of trails connecting refuge units, other parks, and the Chehalem Valley and Coast.
Great sport hunting.
Invasive species minimized and native plants restored.
Source of native wildlife and plants, including wapato.
Acquisition of Wapato Unit completed.
Refuge managed like Sauvie Island Wildlife Area.
Good place for birders and birds.
That it live on in perpetuity.
The refuge is a beautiful place to visit.
Acres of wapato.

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## **GLOSSARY OF ABBREVIATIONS AND ACRONYMS**

CCP: Refuge comprehensive conservation plan  
NWR: National Wildlife Refuge  
NWRS: National Wildlife Refuge System.  
ODFW: Oregon Department of Fish and Wildlife  
TMDL: Total maximum daily load  
TRNWR: Tualatin River National Wildlife Refuge  
USFWS: U.S. Fish and Wildlife Service  
WID: Wapato Improvement District