

Oregon Watershed Enhancement Board
Region 1 (North Coast) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.:	207-139	PROJECT TYPE:	Restoration
PROJECT NAME:	Pacific Shrimp Co Water Conservation Project		
APPLICANT:	MidCoast WSC		
BASIN:	North Coast	COUNTY:	Lincoln
OWEB FUNDS REQUESTED:	\$47,585.00	TOTAL COST:	\$75,635.00

APPLICATION DESCRIPTION:

The MidCoast Watersheds Council is proposing to inventory water use by one of the Pacific Shrimp Company's Newport processing plants over the course of one season in order to track water use for each of the plant's top three water intensive processes; create a water management plan; implement the plan to reduce the plant's water use by 25% for each process; conduct worker education regarding water use in the plant; and maintain 10.25 million gallons of water savings per summer in the Siletz River as a result of the plant's expected reduced demand.

The City of Newport's primary water source is the Big Creek watershed, supplemented by the Siletz River. The City's water right is for 6 cubic feet per second from the Siletz. Juvenile and adult Spring Chinook, juvenile Fall Chinook, juvenile coho, adult summer steelhead, juvenile summer and winter steelhead and Cutthroat trout of a variety of life histories are dependent on this area in summer which is during times of decreased natural flow and high water temperatures in the Siletz. The Pacific Shrimp Company's greatest demand for water occurs in summer corresponding with Whiting (hake) processing. In 2005, Pacific Shrimp used an averaged of 261,000 gallons per day from June through August. A 2002 OSU Hatfield Marine Science Center study listed fish plants as the highest water user in 1994 and the second highest in 1997.

This is a first attempt with an industrial water user to focus on water conservation to improve performance and reduce water use as a tool to preserve in-stream flow and protect habitat. The applicants, as part of this project, will explore possible methods and opportunities with the City to make sure the water saved by Pacific Shrimp remains in the river. The application and letter of support from the City suggest the possibility of a future water right lease proposal for the duration of the project.

The application describes economic benefits through the creation of a demonstration project that integrates water conservation with continued industrial use that could be an example for other industrial and commercial water users. The data developed from the project should also assist the City and water districts by determining impacts of water usage and conservation in a way that could assist in developing a regional water supply plan. Community benefits include building new partners to achieve watershed restoration benefits in an area where environmental protection and economic health are often seen in opposition.

OWEB funds are requested for personnel (plant quality control officer), project manager, education materials, monitoring, best available technology equipment, and administration. Funding partners include Pacific Shrimp, Oregon Water Resources Department, and City of Newport.

REGIONAL TEAM REVIEW:

The RRT acknowledged that seafood processing is the highest user of water in Newport as determined by a Sea Grant study. The RRT liked the potential to keep water in the Siletz River, and even though 10.25 million gallons during the summer is not enormously significant for Siletz flow, summer flow is critical and an improvement of freshwater flow would benefit a variety of salmonids of different species and life histories. The RRT acknowledged that the savings could help for a short time and that this demonstration project could have an impact on other seafood processing facilities in Newport and other coastal communities with similar water supply situations. The RRT was encouraged that the City of Newport had agreed to send a letter of support, as that hadn't been sent prior to their review.

However the RRT felt that the application was not clear about the actual watershed benefits and whether the proposed project will result in water being left in the Siletz River because the water rights aren't proposed as part of this application. The RRT was concerned that growth will simply replace the water saved here because demand for water continues to grow. This application states that a separate application may be submitted to purchase the water rights saved by this project, but it's not clear whether that will really occur. The RRT was concerned that the application did not discuss the water withdrawal impacts or benefits. The RRT also wondered why the applicants didn't start with the city on conservation or infrastructure and water loss projects, instead of with an industrial water user.

The RRT was also concerned that while most of the requested funding is to be used to purchase equipment to filter Yaquina Bay water so that the plant may use that as its source instead of the Siletz River, the application provided no information on the likelihood of success of getting Food and Drug Administration approval of the technology for use with food products destined for human consumption. The RRT was also concerned about the lack of discussion in the application about the potential impacts to the Yaquina estuary of the proposed water withdrawal (i.e. volume, timing or actual methodology of withdrawal).

The RRT felt that this application had a great core idea but the application did not articulate clear watershed benefits or explain a variety of important related issues. If funded the RRT would want a commitment to maintaining the 10.5 million gallons of summer flow in the Siletz River, and for the applicant and City to explore metering of water and other simpler efficiencies in Newport.

RECOMMENDATION: Do Not Fund

STATEWIDE TEAM REVIEW:

The SRT agreed that industry should take on these types of water conservation actions, and that there are real water conservation disincentives in Newport since the city relies upon water rates to fund its staff. They also agreed that this type of demonstration should encourage other industrial water users to adopt water conservation measures. It appears to the SRT that the cost savings from the company's water bill more than pays for the equipment over the two year grant period, so it's not clear why the company isn't willing to pay for a portion of equipment costs. The SRT did recognize that the risk of trying unknown equipment gives the company an incentive to do nothing. Once cost effectiveness and savings are demonstrated, then others will follow suit (and the company will likely use the same equipment at other plants).

While the project does have community benefits, for example it is working to improve stakeholder collaboration and strengthen local capacity to address water use; the SRT didn't feel that the benefits are long-term or significant. It appears that the applicant and business are

pushing the city towards conservation. The SRT would be more comfortable with the project if it was part of a broader water conservation plan that extends the life of the current system.

The SRT is recommending funding based primarily on the economic benefits (it proposes an economic solution and incentives for market change). However, the SRT does not see how the conserved water will benefit fish or water quality, or long-term water conservation. If this project is to be funded, the SRT would like to see OWEB's contribution reduced in half, and for the award to be conditioned upon the commitment from the City of Newport to begin a water conservation plan and to permanently protect some portion of the saved water instream similar to the Conserved Water Statute.

SRT RECOMMENDATION: Fund with conditions.

PRIORITY: 5 of 7

Oregon Watershed Enhancement Board
Region 2 (South Coast) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.: 207-140	PROJECT TYPE: Restoration
PROJECT NAME: South Coast Cranberries	
APPLICANT: South Coast WSC	
BASIN: Rogue	COUNTY: Curry
OWEB FUNDS REQUESTED: \$92,705.00	TOTAL COST: \$121,705.00

APPLICATION DESCRIPTION:

Cranberries were introduced to the South Coast in the early 1900s. The sandy, well-drained, low pH soils in this stretch of coast, combined with abundant water supply provided the favorable conditions for cranberry production. Cranberry production has the potential to negatively impact watershed health through impaired water quality, reduced or altered water quantity, and loss of high quality wetland habitat.

The South Coast Watershed Councils is proposing to work with 10 landowners to address some of these impacts through implementation of a series of best management practices. The proposed solutions (in broad categories) includes plant and soil health and vigor, water conservation and storage, physical bog processes, site improvements for conservation, and improved marketing of South Coast berries. The objectives of the program include increasing yields and productivity of bogs while reducing pesticide/herbicide use, reducing the amount of ground and surface water used, reducing the quantity of sediment delivered into the stream network, and assisting growers with obtaining watershed-friendly certifications.

The landowners chosen for the pilot program were selected because they represent a broad range of philosophies and beliefs, have different-sized operations, and are influential and respected within the cranberry community.

The proposed economic benefits of the program include improving the economic viability for growers by increasing cranberry yields and/or production with some of the area's prominent growers. In addition, through the grant the Council will begin a program of Salmon-Safe certification for the cranberry growers on the South Coast, with the on-the-ground projects proposed used as models of practices for other growers. These efforts should assist landowners to improve their short and long term production and enable continuation of farming rather than development.

The pilot program is also intended to address questions of whether cranberries can be grown organically or with less toxic alternatives. The program is also designed to increase local community understanding of conservation measures being taken by growers, and increase growers awareness of the value of their watersheds and how management of farms has direct effects on the larger ecosystem.

OWEB funds are requested for project management, mileage, administration, plant health and soil vigor, water conservation and storage, physical bog processes, site improvements, marketing, and monitoring. Funding partners include individual growers and Curry SWCD Farm Planner.

REGIONAL TEAM REVIEW:

The RRT felt that the project has good potential water quality benefits because it is treating nutrients, sediment and temperature. The RRT recognized that not much has been done with cranberry growers and that water quality is important in this area where groundwater is fairly shallow and what leaks out of the bogs ends up in drinking water wells. The RRT also recognized that this represents a breakthrough with growers and those in the proposal represent the most progressive ones. One benefit to the project is demonstrating that growers can earn more with environmentally friendly techniques, and the RRT liked the valued-added product tie to water quality.

The RRT felt that the overall project has watershed benefits, and had only minor concerns. They were concerned about just how much effect the work will have on water quality because no monitoring of receiving streams is proposed. The RRT understood that not much monitoring has occurred and recommends that the applicants work with the local DEQ on stream monitoring to document water quality improvement.

The RRT also had concerns about the level of benefits provided to growers in return for a small match contribution. The RRT would like to see landowners contribute more match, approximately \$20,000 towards practices like sanding or relining bogs, which are more standard agricultural practices. The RRT also felt that landowner contributions would make the results of the project more palatable to other growers. To be a success, the project needs to bring other growers to the table and show that there is the market to support these types of management. While not a recommended condition of funding, the RRT would also like to see Ocean Spray tied into the project at some level.

RECOMMENDATION: Fund with the condition to do stream monitoring and increase grower match.

PRIORITY: 1 of 2

STATEWIDE TEAM REVIEW:

The SRT concluded that there are economic benefits from the proposal and that it demonstrates a value-added connection to water quality. The applicants have a good sense of where the market is going (organic or certified products) and have identified practices for growers to implement along with pursuing marketing strategies such as developing the Salmon-Safe or other certification programs. The SRT did acknowledge some economic uncertainty with the proposal, but there is some data on the economic value from certification and the SRT feels like the applicants have made good logical judgments about the future.

This application is building on a Phase I Local Innovation Fund grant that provided funding for the applicants to begin working with cranberry growers. The SRT felt that the proposal has community benefits by involving diverse stakeholders and debunking the perceived social conflicts between cranberry production and watershed restoration outcomes.

The SRT agreed with the RRT and would like to see the grower contribution increased and OWEB's contribution eliminated for the reservoir stabilization practice (because OWEB should not fund the reinstallation of something built incorrectly). The SRT also agreed with the RRT and recommends that the application conduct before and after stream water quality monitoring and recommends that appropriate funding be added to accomplish this activity.

SRT RECOMMENDATION: Fund with conditions (same as RRT).

PRIORITY: 1 of 7

Oregon Watershed Enhancement Board
Region 2 (South Coast) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.:	207-141	PROJECT TYPE:	Restoration
PROJECT NAME:	Applied Forest Restoration, Milling and Manufacturing from private lands		
APPLICANT:	Applegate River WSC		
BASIN:	Rogue	COUNTY:	Josephine
OWEB FUNDS REQUESTED:	\$29,311.00	TOTAL COST:	\$44,794.00

APPLICATION DESCRIPTION:

The Applegate River Watershed Council is proposing to complete baseline forest stand inventories, develop site-based silvicultural prescriptions, implement forest restoration treatments, haul materials to a small mill in the Little Applegate, process the materials to generate kiln-dried finished products, and complete an integrated restoration, manufacturing and market analysis study. The purpose is to identify the extent to which sales of finished products can offset costs of restoration.

The applicants have selected two different sites to be treated (4 acres total) at two different distances from the mill to evaluate hauling costs and investigate revenue by forest type. Site prescriptions will be developed in collaboration with the landowner and forest restoration carried out by Out of the Woods Eco-Forestry, a Forest Stewardship Council certified company that has been working the watershed for 15 years. They will complete implementation monitoring associated with the restoration treatments.

Forest stands in this area are degraded and suffer from high tree densities, skewed diameter distributions, altered species composition, unbalanced spatial arrangements, and high fuel loads. The project is intended to increase forest stand complexity and vigor while decreasing the potential for stand replacing fire.

The resulting products will be certified; therefore the analysis will include an evaluation of a consumer's willingness to pay more for certified products. The analysis will also identify target markets and technology that adds market value to secondary wood products generated from restoration. The applicants anticipate that long term economic stability will result from an integrated restoration/manufacturing model that expands the number of acres that will be treated – the revenue generated from manufacturing could be used to reduce the costs of restoration.

The proposed project will also take place within a community polarized around forest utilization, and will attempt to highlight the strengths and weaknesses of the proposed model in order to move forward with land management on both private and public lands.

OWEB funds are requested for project management, travel, forest restoration, hauling, milling and processing, market analysis, education, and administration. Funding partners include the landowners, Weyerhaeuser Family Foundation, Sustainable Northwest, Association of Oregon Loggers, Mountaineers Foundation, and Oregon Department of Forestry.

REGIONAL TEAM REVIEW:

The RRT liked the idea of addressing the controversy over thinning, that the applicants aren't asking for much funding, and that one potential result is the generation of local markets for small diameter materials. The RRT acknowledged that the main watershed benefit to upland treatments is forest health and reduction of catastrophic fire. However the RRT felt that the amount of acreage treated is too small to provide much benefit and that the application and methodology proposed aren't clear. The RRT wasn't sure whether the project would be using a mobile mill or what specific products would be created. The RRT felt that since the application identifies sites, the applicants should be able to provide more detailed cost information. The RRT was also concerned that the landowners have only committed to one year of maintenance when not much happens in the first year, and to improve water quality through forest health requires a long-term commitment.

The RRT liked the idea of exploring the economics of small forest materials but was concerned that the proposal was too small for the results to be scalable. Nearly one third of the budget is for non-capital expenses such as education and the economic analysis and evaluation of secondary wood products markets, and may not be eligible.

RECOMMENDATION: Do Not Fund**STATEWIDE TEAM REVIEW:**

The SRT agreed that this application is proposing to address the overstocked forest and fire danger issue that is critical for the entire west. However they were unclear about the economic or community benefits of the proposal. The SRT knows that this type of work has been done in the Applegate and elsewhere, but a large portion of the project is an economic evaluation. Some SRT members were familiar with the existing work of the mill to market local products, but that wasn't addressed in the application. The application lists Sustainable Northwest as a partner but doesn't describe what they've already done on this issue in the watershed. The SRT wanted the application to address other healthy forest efforts and explain how the applicants will work with their partners.

The SRT agreed that the LIF should not be a subsidy program and that four acres is probably not enough to answer the important economic or watershed questions, or be scalable to larger endeavors. The SRT also wasn't clear why these four acres were selected. The SRT suggested the applicants look at a larger area and tie the project to more tangible watershed restoration outcomes. For example, the SRT suggested selecting a tributary and doing treatments on the whole watershed where the result will be both watershed restoration and a demonstration of larger scale economic benefits.

SRT RECOMMENDATION: Do Not Fund

Oregon Watershed Enhancement Board
Region 2 (South Coast) Review Team and Statewide Review Team
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APPLICATION NO.:	207-142	PROJECT TYPE:	Restoration
PROJECT NAME:	Salmon-Safe Applegate Restoration Initiative		
APPLICANT:	Applegate River WSC		
BASIN:	Rogue	COUNTY:	Josephine
OWEB FUNDS REQUESTED:	\$20,167.00	TOTAL COST:	\$27,737.00

APPLICATION DESCRIPTION:

The Applegate River Watershed Council is proposing to work with two Salmon-Safe farms to demonstrate the use of bioengineering techniques in salmonid habitat enhancement, erosion control, and riparian restoration. Projects will occur at two sites: West Fork of Williams Creek and Marble Creek (a West Fork tributary). The objectives are to decrease bank and floodplain erosion and increase riparian vegetation at the Marble Creek site; and to increase pool habitat and fish presence, decrease bank erosion and facilitate riparian revegetation at the West Fork site.

Both farms are certified Salmon-Safe through a regional agricultural certification program. Criteria for certification include establishment of riparian buffers, minimizing or eliminating chemical inputs, soil conservation, sound livestock management, water conservation and the maintenance of biodiversity. The program provides local farms a market incentive to implement watershed friendly agricultural practices and restoration projects.

The projects proposed will form part of the curriculum for a new joint ARWC and Salmon-Safe program that recruits and trains beginning farmers in watershed friendly farming techniques. The project is attempting to address the integration of agricultural production with watershed and salmonid conservation – farmers can improve farm marketability and community support by helping to restore and conserve streams and salmon.

OWEB funds are requested for project management, outreach and education personnel, mileage, restoration labor and materials, equipment, and administration. Funding partners include the landowners and Salmon-Safe.

REGIONAL TEAM REVIEW:

The RRT felt that this project represents good restoration practices with strong watershed benefits. Both creeks are small, Marble Creek has good cold water, and the West Fork is a coho, steelhead, and Chinook salmon bearing stream. The RRT acknowledged that the habitat component will provide good benefits.

The RRT was concerned about how innovative the project really is and questioned why they haven't seen this proposal through the regular restoration grant cycle. The project appears to be more clearly a demonstration of restoration for the Salmon Safe program. The RRT did feel that the program's strength and biggest benefit will be getting to new landowners and enrolling folks who would not normally be interested in this type of work on their property.

The RRT also had questions about the existing and proposed fencing and planting maintenance. These concerns were resolved because members knew that there is only livestock (bison) on the ranch that are already fenced away from where the work will be done, and that the Salmon Safe program has requirements for maintenance. The RRT concluded that overall the project is technically strong.

RECOMMENDATION: Fund
PRIORITY: 2 of 2

STATEWIDE TEAM REVIEW:

The SRT agreed that the economic and community benefits of this project are the Salmon-Safe training and certification, which should provide farmers with an economic advantage. The proposed economic solution appears to be indirect, but may provide incentives for market change. The SRT agreed that the applicants are heading in the right direction, but the application doesn't say much about whether certification has brought market returns sufficient enough to make farming viable.

The SRT felt that this is a clear restoration project that could have strong economic and community benefits with some additional information collected about economic conditions before and after implementation (number of farms and employees, gross sales per business, payroll, etc). This way the project would collect some real, quantifiable data on some critical economic factors around agricultural certification. If the applicants cannot collect this information, then the SRT recommends the applicants resubmit the project as a restoration grant. The SRT also recommends that the applicants consider developing a business plan and recommend getting assistance through the Small Business Development Centers located at community colleges.

SRT RECOMMENDATION: Fund with condition to collect pre and post economic condition data.
PRIORITY: 3 of 7

Oregon Watershed Enhancement Board
Region 3 (Willamette Basin) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.: 207-143	PROJECT TYPE: Restoration
PROJECT NAME: Watershed Wide - Youth Engaged	
APPLICANT: Johnson Creek WSC	
BASIN: Willamette	COUNTY: Multnomah
OWEB FUNDS REQUESTED: \$26,024.00	TOTAL COST: \$68,800.00

APPLICATION DESCRIPTION:

The Johnson Creek Watershed Council is proposing to assign youth teams to riparian sites on Johnson Creek for the annual Watershed Wide event, and have the Teams commit to at least four on-site work party experiences over the course of the academic year. Each team will be lead by a Leader/Education Coordinator from one of the partner schools, which include New Urban High School, David Douglas High School (Natural Resources CAM academy), and Multnomah Youth Cooperative (Open Meadow's Corps of Restoration for the Urban Environment may also participate). Work could include refuse and invasive plant removal, native shrub and tree planting, mulching, stream bank restoration, and educational outreach.

The goals of the project include connecting high risk youth to their watershed community, having Youth Teams invest in at least four on-site restoration and monitoring experiences, having council staff providing materials, tools and advice, and having the Teams be featured speakers and presenters of their work. These goals fit within the Watershed Wide Event's goals including recruiting a diversity of partners and creating conditions for restoration.

The economic impacts of the proposal include potential increases to home sales prices in the vicinity of restored natural areas, economic incentives for schools to build watershed stewardship into their curriculum, and for students to gain potential employment skills. The program builds on existing community involvement programs by engaging youth and schools and attempts to improve stewardship and watershed health.

OWEB funds are requested for a stewardship coordinator, outreach coordinators, bus transportation, mileage, classroom substitutes, Multnomah Youth Cooperative crew, native trees and shrubs, water quality test kits, newsletter printing, meetings, equipment, monitoring and administration. Funding partners include the schools, City of Portland, City of Milwaukie, City of Gresham, Clackamas County, and council volunteers.

REGIONAL TEAM REVIEW:

The RRT felt that the Johnson Creek watershed is challenging because of the level of impervious surface and amount of housing in the riparian and floodplain zones, which means we cannot address some key limiting factors. Therefore restoration activities also need to include education on watershed function and how not to recreate problems. The RRT felt that this proposal strongly includes that component and has merit.

While the RRT felt that this was a good idea, the proposal lacked the detail to make it a clear restoration project with tangible watershed benefits. From the submitted budget it appears to be more of an education project and therefore may be ineligible to use OWEB capital funding. The

RRT recommends that the proposal include more information on the sites that will be restored and what is being proposed at each site if it wants to compete as an on-the-ground restoration proposal.

RECOMMENDATION: Do Not Fund. The RRT suggests the applicant submit as education or restoration grant with appropriate changes to the proposal in October 2006.

STATEWIDE TEAM REVIEW:

The application cites studies suggesting that surrounding property values may increase due to restoration of urban wetlands. The SRT, however, agreed that a possible increase in property values does not appear to be a direct on-going economic incentive, and is not a documented economic solution or incentive for market change. The SRT concluded that this would be a nice community project with some benefit from connecting the community and restoration, but that it is not a good fit with the Local Innovation Fund.

SRT RECOMMENDATION: Do Not Fund

Oregon Watershed Enhancement Board
Region 3 (Willamette Basin) Review Team and Statewide Review Team
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APPLICATION NO.:	207-144	PROJECT TYPE:	Restoration
PROJECT NAME:	Lower Columbia Slough Habitat Restoration and Education Project		
APPLICANT:	Columbia Slough WSC		
BASIN:	Lower Columbia	COUNTY:	Multnomah
OWEB FUNDS REQUESTED:	\$44,545.00	TOTAL COST:	\$166,085.00

APPLICATION DESCRIPTION:

The Columbia Slough Watershed Council is proposing replacement of two 50-year old culverts on flood control conveyance ditches at the Columbia Children's Arboretum with pedestrian bridges. The project also includes development of an accessible trail system, the restoration of native vegetation, and installation of two interpretive trailhead signs at the east and west public access points.

The current condition of the site is that portions of the flood control conveyance are partially blocked, and the ditch that abuts the western edge of the Children's Arboretum is one of two major stormwater drainage ditches in the system. The ditch and culverts do not support current stormwater flow. The proposal is consistent with the park's Master Plan completed in 2005, the Drainage District's plans for removal and replacement with bridges, and with the Columbia Slough Action Plan.

Economic benefits are expected by increasing home prices in the area of the park based on studies showing increased sale prices for homes located near natural area parks. The park has been a source of community, business and public agency collaboration and has a history of significant volunteer involvement.

OWEB funds are requested for council project management, engineering, graphic design, earthwork and culvert removal, bridge installation, plants and mulch, and administration. Funding partners include the Peninsula Drainage District, City of Portland, and East Columbia Neighborhood Association.

REGIONAL TEAM REVIEW:

The RRT supports the idea of restoration of greenspaces in an urban area like Portland because it is rare. However it the application does not clearly describe the watershed benefits of the proposal. The RRT felt that the application seems more concerned with aesthetics instead of watershed benefits. It is unclear whether the stormwater drainage ditches where the culverts are proposed for replacement are hydrologically connected to the Columbia Slough or provide fish habitat or water quality benefits. The RRT was concerned that the benefits would be increasing stormwater capacity and recreation values of the park, but not biological values. The application also didn't include conceptual designs or describe how the site is connected to other restoration efforts in the Columbia Slough watershed.

RECOMMENDATION: Do Not fund

STATEWIDE TEAM REVIEW:

The application cites studies suggesting that surrounding property values may increase due to restoration of urban wetlands. The SRT, however, agreed that a possible increase in property values does not appear to be a direct on-going economic incentive, and is not a documented economic solution or incentive for market change. Enhancement at a city park will have community benefits, but the project doesn't explicitly address conflicts between the community and restoration or improve diverse stakeholder collaboration. The SRT was also concerned that this application was submitted around the normal grant review and submittal processes of the watershed council.

SRT RECOMMENDATION: Do Not Fund

Oregon Watershed Enhancement Board
Region 3 (Willamette Basin) Review Team and Statewide Review Team
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APPLICATION NO.:	207-145	PROJECT TYPE:	Restoration
PROJECT NAME:	Zenger Farm - Upland Habitat Restoration and Water Quality Project		
APPLICANT:	Friends of Zenger Farms		
BASIN:	Willamette	COUNTY:	Multnomah
OWEB FUNDS REQUESTED:	\$49,226.00	TOTAL COST:	\$74,725.00

APPLICATION DESCRIPTION:

Friends of Zenger Farms, in partnership with Verde Native Plant Nursery, will prepare, install and ensure plant establishment of a bioswale, landscape buffer, vegetative filter strip, and planter box on the upland portion of the farm. Zenger Farms is located in the Johnson Creek watershed and is one of few working urban farms in the Portland city limits. The 16-acre property is owned by the City of Portland and is a community-learning center for sustainable food systems, environmental stewardship and local economic development. The upland six acres include two acres of organically cultivated crops as well as an old farmhouse, barn and outbuildings. The property also contains a 10-acre wetland and a spring.

The site's infrastructure must be improved to be able to continue its mission, which includes being a functioning community center. The applicants are involved in building a Zenger Urban Agricultural Park on the 3.79-acre upland portion of the property, including the bioswales and landscaping improvements proposed in this application. The objectives are removal of invasive species, installation of native plants and erosion control seeding, stormwater management, monitoring plant establishment, income and job training, and community communication. The proposal is part of the Johnson Creek Restoration Plan.

Economic benefits are expected by increasing home prices in the area of the park based on studies showing increased sale prices for homes located near natural area parks. The project also involves Verde Native Plant Nursery, which creates earned income and job-training opportunities for nursery employees, who are recruited from Hacienda CDC's affordable housing and other disadvantaged communities. A project goal is to have those employees gain valuable skills that will enhance their future job opportunities. Improvements at the site will also enable the park to serve more of the community and schools. The goal is to reach 5000 students annually by 2010 and triple the annual visits by adults.

OWEB funds are requested for bioswales and landscape installation, native plant and seed materials, training, monitoring and administration. Funding partners include a grant from Meyer Memorial Trust to the applicant and Verde.

REGIONAL TEAM REVIEW:

The RRT liked this proposal because it is innovative and different, but they were concerned about a lack of detail about the project's watershed benefits. The RRT concluded that there are water quality benefits from the proposal, but the application doesn't clearly describe those benefits. It is unclear to the RRT from where the proposed bioswale is capturing water and to where it will go. The RRT guessed that the proposed bioswale would be treating stormwater from the new impervious surfaces being built as part of implementing the master plan. The RRT

felt that other watershed benefits could have been described better, for example the application doesn't discuss benefits to soil health or how it connects to other local efforts including the adjacent Beggar's Tick Marsh. Finally the RRT was concerned that the application is requesting funding for stormwater treatment that is required by the City of Portland, which would make the proposal ineligible for OWEB funding. OWEB staff contacted the city and applicant and learned that what is proposed is above and beyond the city's stormwater treatment requirements, in part due to the educational nature of the property.

RECOMMENDATION: Do Not Fund

STATEWIDE TEAM REVIEW:

While the property is providing a good resource and model within Portland, and the watershed improvement goals are laudable, the SRT was unclear about what economic solution or incentives will result from the proposal. The application cites studies suggesting that surrounding property values may increase due to restoration of urban wetlands. The SRT, however, agreed that a possible increase in property values does not appear to be a direct on-going economic incentive, and is not a documented economic solution or incentive for market change. The proposal will create temporary jobs at Verde, but the SRT thought that the price tag was high for such small scale benefits. The SRT felt that community benefits and connecting the community to restoration will be achieved by the proposal, but that the project doesn't appear to meet the intent of the LIF grants.

SRT RECOMMENDATION: Do Not Fund

Oregon Watershed Enhancement Board
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APPLICATION NO.: 207-146	PROJECT TYPE: Restoration
PROJECT NAME: Columbia Sedge Meadow Restoration	
APPLICANT: Columbia Slough WSC	
BASIN: Willamette	COUNTY: Multnomah
OWEB FUNDS REQUESTED: \$57,900.00	TOTAL COST: \$85,044.00

APPLICATION DESCRIPTION:

The Columbia Slough Watershed Council, in partnership with Verde Native Plant Nursery, is proposing to restore two remaining Columbia sedge meadows at Smith and Bybee Wetlands Natural Area by installing Columbia sedge on the perimeter of the existing meadows to reconnect the two adjacent meadows. The project will also include control of invasive plants through mechanical and chemical means, depending on the circumstance of the site. The project objectives include enhancing existing sedge meadows, developing effective methods for establishing Columbia sedge meadows, and providing job training for Verde employees.

The proposal fits within the Columbia Slough Watershed Action Plan and the Natural Resources Management Plan for Smith and Bybee Lakes.

Economic benefits are expected by increasing home prices in the area of the park based on studies showing increased sale prices for homes located near natural area parks. The project also provides employment for low-income people to work on restoration projects and provide job skills and community-based economic development. The Verde Native Plant Nursery is an environmental job, job training and entrepreneurial development project, targeting low-wealth residents of Hacienda Community Development Corporation's affordable housing and other disadvantaged communities. Nursery employees will receive family wages with benefits, work in a healthy and environmentally beneficial field, have year-round and full-time employment, receive job training, and have the chance to become business owners.

OWEB funds are requested for nursery employees, mileage, plants, planting supplies, training, outreach, monitoring and maintenance, and administration. Funding partners include Metro and Verde. This application is a re-submittal of a restoration application submitted by Verde Nursery in April 2006 (#207-077). Changes to the application for the LIF include project management costs going to the Council and an increased match.

REGIONAL TEAM REVIEW:

The RRT evaluated this proposal as both a restoration grant (207-077) and Local Innovation Fund proposal. The RRT felt that this is a good project with strong ecological values of restoring native vegetation. The RRT liked that the intent of the proposal is to expand and connect onto existing sites and that they are trying techniques to combat invasive grass that have not been seen before.

The RRT felt that the application was lacking some details. The RRT was also concerned about a lack of benefit to fisheries, high administrative and mobilization costs, and high per acre costs.. The RRT also discussed the importance of water levels in maintaining the improvements, and

would like to see the project incorporate a water level management plan or other actions to ensure that reed canary grass doesn't get reestablished on the sites.

RECOMMENDATION: Fund with condition that there is a water level management plan to maintain improvements.

PRIORITY: 1 of 2

STATEWIDE TEAM REVIEW:

The application cites studies suggesting that surrounding property values may increase due to restoration of urban wetlands. The SRT, however, agreed that a possible increase in property values does not appear to be a direct on-going economic incentive, and is not a documented economic solution or incentive for market change. Economic benefits could result from creating jobs that exist after the grant goes away. The proposal will create temporary jobs at Verde for low-income and disadvantaged communities, but the application wasn't clear what will happen to those jobs after this grant ends. Some SRT members understand that Verde is trying to develop their business and employee knowledge and the hope is that some of the employees will go off and start their own businesses. The SRT felt that the application could have been more economically compelling from the nursery business angle.

The SRT agreed that this is a significant wetland (even though it is small) and the project partners are trying new ways to suppress reed canary grass. The application shows that Verde employees will have appropriate technical guidance, so the project will have benefits from both increasing knowledge and improving native plants. The project should also have community benefits, including involvement by diverse stakeholders and encouraging greater engagement in restoration by disadvantaged communities.

SRT RECOMMENDATION: Fund

PRIORITY: 4 of 7

Oregon Watershed Enhancement Board
Region 3 (Willamette Basin) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.:	207-147	PROJECT TYPE:	Restoration
PROJECT NAME:	Crystal Springs Restoration and Enhancement Project		
APPLICANT:	Hacienda CDC - Verde		
BASIN:	Willamette	COUNTY:	Multnomah
OWEB FUNDS REQUESTED:	\$42,860.00	TOTAL COST:	\$75,439.00

APPLICATION DESCRIPTION:

Verde is proposing to restore 16 acres of critical habitat along Crystal Springs Creek at the Eastmoreland Golf Course in the Johnson Creek watershed. Urbanization, development, and channelization have adversely impacted Crystal Springs. The creek is fed by two sets of springs, which provide a steady source of cold water (about 10 cubic feet per second) throughout the year. The creek has the potential to provide spawning, rearing and refuge habitats, but there are a number of culverts and instream structures that inhibit access and habitat structure is lacking in most of the creek. In the riparian corridor, less than 5% is mature forest.

The applicants are proposing to develop and implement a planting and erosion control plan with the City of Portland (who will be completing instream work) to install native tree and shrub communities along approximately 5,860 linear feet of streambank. The project will also include site preparation to remove non-native invasive vegetation, planting native trees and shrubs, seeding native herbaceous grasses and forbs, maintenance treatments to reduce coverage of invasive plants, education of employees and the community, and monitoring. The overall goal of the project is to connect family wage jobs for low-income people with watershed health by providing jobs and job training opportunities in riparian enhancement and restoration.

The proposed project is consistent with the Portland Watershed Management Plan (2005), the Johnson Creek Restoration Plan (2001), and the Johnson Creek Watershed Council's Action Plan (2004). The proposed project is immediately downstream of a 12-acre restoration project at Reed College.

Economic benefits are expected by increasing home prices in the area of the park based on studies showing increased sale prices for homes located near natural area parks. The project also provides employment for low-income people to work on restoration projects and provide job skills and community-based economic development. The Verde Native Plant Nursery is an environmental job, job training and entrepreneurial development project, targeting low-wealth residents of Hacienda Community Development Corporation's affordable housing and other disadvantaged communities. Nursery employees will receive family wages with benefits, work in a healthy and environmentally beneficial field, have year-round and full-time employment, receive job training, and have the chance to become business owners. This grant would support 4 worker positions.

OWEB funds are requested for personnel (3 person crew and design assistant), native plants, training and monitoring. Funding partners include the applicant and City of Portland.

REGIONAL TEAM REVIEW:

Crystal Springs is a source of cold water at the confluence with Johnson Creek, which makes a difference for water quality. The RRT felt that there will be watershed benefits from the proposed riparian restoration.

While the proposal has watershed benefits, the RRT had concerns about a lack of detail and innovation with the proposal. The application is missing details on what they are taking out and what species they are putting in, and doesn't address golf course management practices such as fertilizer management. The RRT felt that there also could be more benefit to fish from work in this watershed. Since the work will be done on public property, the RRT felt that Portland Park's landscapers/engineers could have teamed up with the applicant to make this a stronger proposal. Finally, the RRT is concerned that this proposal only addresses riparian cover and vegetation along the channel and not the instream structural issues that are contributing to warmer water in the creek. The RRT does believe there are watershed benefits to the proposal, but would like to review a detailed planting plan for the site.

RECOMMENDATION: Fund with condition that the applicants submit a planting plan for review by select RRT members.

PRIORITY: 2 of 2

STATEWIDE TEAM REVIEW:

The application cites studies suggesting that surrounding property values may increase due to restoration of urban wetlands. The SRT, however, agreed that a possible increase in property values does not appear to be a direct on-going economic incentive, and is not a documented economic solution or incentive for market change. Economic benefits could result from creating jobs that exist after the grant goes away. The proposal will create four jobs at Verde for residents of low-income and disadvantaged communities, but the application wasn't clear what will happen to those jobs after this grant ends. Some SRT members understand that Verde is trying to develop their business and employee knowledge and the hope is that some of the employees will go off and start their own businesses. Again, similar to 207-146, the SRT felt that the application could have been more economically compelling from the nursery business angle.

The project should also have community benefits, including involvement by diverse stakeholders and encouraging greater engagement in restoration by disadvantaged communities. However, the SRT was concerned that these are not strong long-term community benefits.

The economic and community benefits from this project are similar to application 207-146, the Columbia Sedge Meadow Restoration project, which is why the SRT concluded a "fund" recommendation. However, while the SRT felt that this is a good restoration project in an area where lots of work has been done, it is lacking strong innovative watershed, economic or community benefits.

SRT RECOMMENDATION: Fund
PRIORITY: 6 of 7 (tie with 207-149)

Oregon Watershed Enhancement Board
Region 4 (Central Oregon) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.:	207-148	PROJECT TYPE:	Restoration
PROJECT NAME:	Mosier Community Groundwater Management		
APPLICANT:	Wasco SWCD		
BASIN:	Hood	COUNTY:	Wasco
OWEB FUNDS REQUESTED:	\$113,548.00	TOTAL COST:	\$305,798.00

APPLICATION DESCRIPTION:

Aquifers in the Mosier Valley have been dropping approximately 4 feet per year since the early 1970s. The decline has been monitored by the Oregon Water Resources Department, which in 1988 declared the Mosier Valley a Groundwater Withdrawal Area and stopped issuing new water rights for wells in the affected area. The aquifer provides drinking water for the City of Mosier, rural residents and 900 acres of high value orchard. Irrigated orchards use the most water with the average efficiency of irrigation in the valley at about 75%.

In 2005, the Wasco County SWCD began collaborating with the Mosier Watershed Council and US Geological Survey (USGS) to study the ground water resource and develop a detailed water budget for the area. USGS is collecting data on aquifer levels, stream flow and water use.

The application states that drip irrigation combined with tree row mulch brings irrigation efficiency to about 95%. The applicants are proposing to fund 75% of the design and installation costs of drip irrigation and mulch on 120 acres of existing orchards. The project would also include using the results of the USGS study to engage the community to discuss the results and develop a community consensus regarding what to do through facilitated discussions with the affected interests. Finally, the project would continue operation of a stream gage after completion of the groundwater study to document results of the irrigation efficiency projects.

The project is consistent with the Mosier Watershed Council Groundwater Action Plan (2005) and the Mosier Watershed Assessment, which found that while the watershed is in relatively good condition, stream flow is low and the stream is listed on the 303(d) list for summer temperatures. The assessment concluded that groundwater decline appears to be the major impact on water quality and watershed function.

The economy of Mosier is based primarily on orchards, with recreation being a secondary income source. A lack of groundwater supply will affect the orchard industry first. In recent years, orchardists have been adopting more efficient technologies, mostly microsprinklers (85% efficiency). Drip irrigation and mulch have higher efficiencies, but also have a number of technical difficulties. Because the resource is shared without regulation or coordination, there is no economic incentive to cut back.

The City of Mosier is upgrading their water systems to increase efficiencies and is engaged with the orchardists through the watershed council. The project will also provide improved knowledge about the resource and an opportunity for the community to determine next steps beyond the planned city and proposed orchard efficiency improvements. The project will engage all major water users, including representatives of fish and wildlife.

OWEB funds are requested for personnel, irrigation system design and installation, streamflow monitoring (USGS stream gage), and administration. Funding partners include the USGS, Natural Resources Conservation Service, landowners, and Oregon Water Resources.

REGIONAL TEAM REVIEW:

The RRT acknowledged that there is a serious groundwater problem in the Mosier Watershed. The RRT liked that the project is proposing to implement sustainable ground water use and is trying to work with both urban and agricultural users. The RRT concluded that the proposal will result in water savings and has value by comparing these techniques against existing irrigation techniques through the withdrawal metering. Even though there is only ½ mile of river before a natural barrier, an improvement in stream flow will benefit fish species.

The RRT did have questions about why only 120 acres of the 900 irrigated acres and whether the reductions from these acres will show up in the USGS streamflow monitoring. The RRT recognized that the limited number of acres is because they are demonstrating the adoption of a new irrigation technology, and that change will be shown more clearly through a meter of the groundwater withdrawals. The RRT recommends that the applicants do an evaluation of the impacts from the drip and mulch on yields if the purpose is to get other orchardists to adopt this technology and promote recently completed studies done in the area. The RRT would also like to see the City of Mosier be partner in the proposal and commit to an in-kind contribution. The RRT acknowledged there are educational challenges with city residents, as growth is being driven by seasonal recreational use.

RECOMMENDATION: Fund
PRIORITY: 1 of 1

STATEWIDE TEAM REVIEW:

The SRT felt that the community discussion and consensus building part of the proposal are strong components of the long-term economic and community benefits. The partners have organized a large enough group that recognizes that there is a problem and is willing to do something. The SRT recognized that the restoration activities in this project are only addressing a portion of the solution, an issue raised by the RRT, but they were more comfortable with the proposal because activities are proposed within a broader conservation framework. The SRT concluded that the economic and community benefits are the future of Mosier, preserving economic activity, and continued agricultural viability.

The SRT recognized that drip irrigation is proven technology and will reduce water use. However, the SRT was concerned that without monitoring of every well, there won't be any long-term change in groundwater levels and water usage. Water not used that stays in the ground or that ends up as flow for fish will have a habitat benefit. The SRT recommends that the City of Mosier be involved in the project as a partner.

SRT RECOMMENDATION: Fund with the condition to involve the City of Mosier.
PRIORITY: 2 of 7

Oregon Watershed Enhancement Board
Region 5 (Eastern Oregon) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.:	207-149	PROJECT TYPE:	Restoration
PROJECT NAME:	Juntura Malheur River Stream Protection Project		
APPLICANT:	SE Oregon RC&D		
BASIN:	Owyhee-Malheur	COUNTY:	Malheur
OWEB FUNDS REQUESTED:	\$146,243.00	TOTAL COST:	\$209,549.00

APPLICATION DESCRIPTION:

Highway 20 between Burns and Vale (113 miles) has no public restroom facilities available to travelers. The community of Juntura is located approximately half way between the two cities; the restroom facility at its one restaurant is insufficient to meet demand. The highway parallels the Malheur River for approximately 40 miles. Existing pullouts are accumulating waste, and human effluent is contaminating the river. The Malheur River has tributaries that are listed for *e-coli* on the 303(d) list and the TMDL lists *E. coli* as a concern.

The applicants, in partnership with the local soil and water conservation districts, watershed councils, the Burns-Paiute Tribe, Oregon Department of Transportation, Malheur and Harney counties, and local landowners, are proposing to eliminate the waste problem by installing a restroom facility in Juntura along Highway 20. The project's objectives are to reduce human waste along the 40 miles of highway adjacent to the river, reduce *E. coli* in the same stream reach, increase Juntura business and economic opportunities, encourage and improve tourism and recreational activities, and increase public awareness. A future informational kiosk is planned to highlight watershed restoration efforts in Malheur County.

The economic benefits of the proposal include providing a rest area where one is lacking to encourage tourism both by providing needed facilities and by reducing the amount of trash and human waste that impact the Malheur River and community. The rest area will also improve the community's look and address an ongoing and entrenched social problem. The project has involved multiple partners in developing the proposed solution.

OWEB funds are requested for project management, travel, rest area construction, well drilling, septic installation, parking lot installation, electric hook-up, hardware, educational kiosk, monitoring and administration. Funding partners include V Box Land and Livestock Inc (landowner), and Oregon Department of Transportation/Malheur County.

REGIONAL TEAM REVIEW:

The RRT confirmed that the lack of public restroom facilities is a real watershed issue. The restaurant in Juntura has had multiple changes in ownership and there is often no place to stop. The RRT noted that Willow Creek, a tributary of the Malheur River, is listed for *E. coli*, but that is east and downstream of Juntura. The RRT noted that the Bureau of Land Management is finishing a recreation plan for the hot springs, hunting and bird uses in the area, and the lack of facilities for this high use area is an issue. The proposed public facility is something the BLM would like to do, but recreation funding has been cut. The project would also complement other projects implemented in this area by the Malheur SWCD, Harney SWCD and the BLM.

Although there are watershed benefits to the proposal, the RRT did not feel that OWEB should be the major funding source for this type of project. The RRT recommends a partial award, not intended to meet the full need, but an amount in recognition that OWEB can make a contribution to solving the problem with other partners such as BLM.

RECOMMENDATION: Fund at reduced amount (amount to be determined).
PRIORITY: 1 of 1

STATEWIDE TEAM REVIEW:

The SRT agreed that something must be done and that a rest area with restrooms is a good thing to do for the community and for water quality, but it questioned whether the project has economic benefits. The SRT wondered whether funding for the restaurant to improve its facilities might have more of an economic benefit. The proposal seems to have stronger community and social benefits such as involving diverse stakeholders, changing behavior and the opportunity to educate the public on watershed and health issues. However, the SRT would like to have seen the applicants provide examples of successful changes in similar behavior.

The SRT recommended funding because the rest area should prevent waste in the stream and has community benefits. However, it wasn't sure whether OWEB was the appropriate funding source. An educational kiosk about the river and habitat benefits is a condition of its recommendation. The SRT also recommends that the applicants incorporate some sustainable building elements in the rest area, such as low flow fixtures or solar power.

SRT RECOMMENDATION: Fund with conditions.
PRIORITY: 6 of 7 (tie with 207-147)

Oregon Watershed Enhancement Board
Region 5 (Eastern Oregon) Review Team and Statewide Review Team
Evaluation for June 15, 2006 Applications

APPLICATION NO.: 207-150	PROJECT TYPE: Restoration
PROJECT NAME: County Fair Settling Pond	
APPLICANT: Malheur WSC	
BASIN: Owyhee-Malheur	COUNTY: Malheur
OWEB FUNDS REQUESTED: \$11,465.00	TOTAL COST: \$16,925.00

APPLICATION DESCRIPTION:

In 2001, the City of Ontario began a monthly storm drain monitoring program. The county fairgrounds has a buried storm drain that runs through the property and empties into an open canal on the north side of the property that runs less than two miles to the Snake River. Random sampling of the drain has shown high *E. coli* counts on many occasions. The north end of the fairgrounds is home to the rodeo arena and year-round stables. Run-off from the fields, arena, and stables cause contaminated water to end up in the stormdrain system.

The applicants are proposing to construct a berm and settling pond to channel the run-off from the area to an existing drain that will be connected by pipe to a settling pond. The pond will be fenced off and appropriately lined to prevent seepage and allow evaporation of the run-off. The goal is to prevent contaminated run-off from entering the storm drain system and the Snake River. The project is consistent with the Snake River-Hells Canyon TMDL, the Malheur SB1010 plan (2001), and the Malheur Basin Action Plan (1999).

Economic benefits of the proposed project are demonstrating this type of solution for the community. There is also benefit from treatment of an area that is heavily used by adults, children and families, including the 4H, rodeo clubs, and the Future Farmers of America. This project is also improving the collaboration between the city and county.

OWEB funds are requested for engineering, project management, fence installation, pipe, bentonite, fence materials, and administration. Funding partners include Malheur County.

REGIONAL TEAM REVIEW:

The RRT acknowledged that there is a real water quality problem at this site. Runoff goes into the stormdrain and to the river carrying bacteria and sediment. Through the TMDL process, the drains were identified as a major contributor of both sediment and bacteria.

However, the RRT felt that the proposed project will have limited watershed benefits because it will only address the surface runoff and not the discharge from the wash racks in the stables. The RRT was also concerned about the use of a berm and settling pond in an area used by many people. The application also does not address the potential black fly and mosquito problems from the settling pond. The RRT concluded that this is only a partial fix and the better solution would be to re-plumb the wash racks and pump all the runoff to the city sewage treatment plant, which they believe has the available capacity.

RECOMMENDATION: Do Not Fund

STATEWIDE TEAM REVIEW:

The SRT agreed that the county should be addressing this problem and has the responsibility to fix the problem. The SRT recommends that the county get a low-interest loan from Oregon Economic and Community Development Department's wastewater program to connect the arena and stables to the city's sewage treatment plant.

SRT RECOMMENDATION: Do Not Fund.