Table 6-10. Restoration opportunities in the City of Woodland (Assessment Unit WO).

ID	Type*	Action	Status	Entity	Source Plan/ ID
131 WO	Hrf	Maintain and restore riparian vegetation within the designated floodway.	New	TBD	TWC
132 WO	Hr	Plant shoreline vegetation at Horseshoe Lake Park.	New	City of Woodland Parks Department	TWC
133 WO	Hr	Remove invasive vegetation and replant with native vegetation south of the CC Street Bridge.	New	TBD	City of Woodland

*TYPE = project type: H=habitat (f=floodplain/off-channel, w=wetland, I-instream, r=riparian), M=management, W=water quality, Y=hydrology, P= fish passage, A=acquisition/protection, R=research/investigation, G=regulatory, O=outreach

7. IMPLEMENTATION STRATEGY

7.1. Local/Regional Planning and Coordination

Cowlitz County and the cities of Castle Rock, Kalama, Kelso, and Woodland participate in the Cowlitz Wahkiakum Council of Governments (CWCOG). The Council of Governments provides a regional forum to address issues of mutual interest and concern, develop recommendations and provide technical services. Because the CWCOG focuses on regional and local planning, transportation planning, community and economic development planning, and technical assistance, it provides an opportunity for coordinated restoration planning and implementation. One potential mechanism to encourage implementation of shoreline restoration actions would be to incorporate shoreline restoration goals and projects into Capital Improvement Programs (CIP), Parks Master Plans, and Six-Year Transportation Improvement Plans.

The County and Cities will continue their association and involvement with their restoration partners. The County and Cities may also look for other time sensitive opportunities for involvement in regional restoration planning and implementation.

7.2. Funding Opportunities for Restoration

Some restoration projects and programs within the County could be funded by County general funds, utilities funds, or parks funding; however, many of the proposed habitat restoration projects will require outside funding through federal or state grants, as well as local, private, or non-profit matching funds. Projects may be funded in multiple phases, with different funding sources appropriate for each phase. It should be noted

that potential funding sources are not limited to those identified below. Potential grant sources and a description of their applications are provided in Table 7-1.

Table 7-1. Potential funding sources for shoreline restoration in Cowlitz County.

Funding Program	Description	Source/ Grant Administrator
Salmon Recovery Funding Board	Funding to improve important habitat conditions or watershed processes to benefit salmon and bull trout. Projects must go through selection by local lead entities and must address goals and actions defined in regional recovery plans or lead entity strategies.	Washington Recreation and Conservation Office
Aquatic Lands Enhancement Account	Funds the acquisition, improvement, or protection of aquatic lands for public purposes.	
Washington Wildlife Recreation Program	Funds a range of land protection and outdoor recreation, including park acquisition and development, habitat conservation, farmland preservation, and construction of outdoor recreation facilities. Provides funds to restore riparian vegetation.	
Family Forest Fish Passage Program	Provides funding to small forest landowners to repair or remove fish passage barriers. The state typically provides 75% – 100% of removal and replacement costs.	
Whole Watershed Restoration Initiative	Funds habitat restoration in Priority Basins. The lower Columbia River is one of the Priority Basins, including WRIA 25, 26, and 27. Funding for individual projects ranges from $20,000 to $100,000.	Ecotrust
Bonneville Power Administration	Funding for habitat projects to mitigate impacts of dam operations on the Columbia River.	Bonneville Power Administration
PacifiCorp	PacifiCorp provides annual funding to implement restoration that will benefit fish recovery and enhance fish habitat in the North Fork Lewis Basin.	PacifiCorp
Watershed Planning Act	Funding for local development of watershed plans for managing water resources and for protecting existing water rights.	Washington Department of Ecology
Centennial Clean Water Fund	Funds water quality infrastructure and projects to control non-point source pollution.	
Section 319	Funds non-point source pollution control projects.	

Funding Program	Description	Source/ Grant Administrator
Clean Water State Revolving Fund	Provides low interest and forgivable principal loan funding for wastewater treatment construction projects, eligible nonpoint source pollution control projects, and eligible Green projects.	
Conservation Reserves Enhancement Program	This program provides funds to farmers who maintain riparian buffers on on-site waterbodies. The funds cover technical assistance, plant costs, and land "rental" fees.	Cowlitz Conservation District
Conservation Partners	Provides technical assistance to farmers, ranchers, foresters and other private landowners to optimize wildlife habitat conservation on private lands.	National Fish and Wildlife Foundation
Five Star and Urban Waters Restoration Fund	Funds community stewardship and restoration of coastal, wetland and riparian ecosystems.	
NOAA Open Rivers Initiative	Funds the removal of obsolete dams and other stream barriers to improve fisheries, enhance public safety and boost local economies through benefits resulting from removal. Awards range from $100,000 to $3,000,000.	NOAA's Restoration Center
American Sportfishing Association's FishAmerica Foundation Grants	Fund marine and anadromous fish habitat restoration projects that benefit recreationally fished species. Typical awards range from $10,000 to $75,000.	
Stream Barrier Removal Grants	Funds stream barrier removal projects that benefit anadromous fish. Grant program is administered through American Rivers, in partnership with NOAA's Restoration Center.	
Partners for Fish and Wildlife	Provides technical and financial assistance to landowners to improve their property for targeted fish and wildlife species without a long-term easement contract.	U.S. Fish and Wildlife Service
National Fish Passage Program	Funds priority projects to improve fish passage.	
North American Wetlands Conservation Act Grants Program	Provides matching funds for acquisition, enhancement, and restoration of wetlands that benefit waterfowl habitat.	

7.3. Development Incentives

The County and cities may provide development incentives for restoration, including development code incentives (e.g., height, density, impervious area or lot coverage). This may serve to encourage developers to try to be more imaginative or innovative in

their development designs to include conservation efforts. Examples include the installation of rain gardens or LID features above and beyond DOE requirements, shared parking, exceeding landscape or open space requirements, or other innovative measures that benefit the environment and the citizenry.

7.4. Landowner Outreach and Engagement

The County and cities could emphasize and accomplish restoration projects by engaging community volunteers and coordinating with non-profit organizations. Volunteer engagement can have the added benefit of encouraging or guiding local residents to become more effective stewards of the land. Programs that provide ongoing assistance and resources to landowners through plantings, equipment use or technical support can also have a far reaching impact on shoreline functions.

7.5. Maximizing Mitigation Outcomes

Although projects identified in this plan are identified as restoration opportunities, this document may serve as a source to identify large-scale opportunities that could be used to optimize mitigation outcomes where on-site mitigation opportunities are limited due to building site constraints, limited potential ecological gains, or other site-specific factors.

These large-scale mitigation projects could be implemented through concurrent, permittee responsible mitigation, or through mitigation banking or an in-lieu fee program. It should be noted that the application of mitigation banking and in-lieu fee programs is not limited to wetlands and could be applied to mitigation for impacts to shorelines and endangered species. Whereas mitigation banking requires capital investment and ecological enhancement prior to the exchange of debits and credits, an in-lieu-fee program establishes a program in which funds are collected from permittees for unavoidable impacts, and these funds are pooled and used to implement mitigation projects within three growing seasons of the impact.

7.6. Monitoring

Monitoring of the effectiveness of restoration actions enables opportunities to adaptively manage future restoration efforts to maximize project outcomes. The Lower Columbia Fish Recovery Board developed a research, monitoring, and evaluation (RM&E) program plan in 2010 (LCFRB 2010c). LCFRB's RM&E Program includes recommendations for habitat status and trends monitoring, fish status and trends monitoring, project implementation and effectiveness monitoring. The program also identified key research needs. LCFRB is coordinating with regional, state, and federal

partners to develop an integrated status and trends monitoring (ISTM) design for the Lower Columbia. The LCFRB is presently working to bridge efforts of the ISTM program with municipal stormwater monitoring and reporting requirements. This sort of coordinated effort is expected to maximize monitoring resources to track changes in ambient watershed conditions over time and provide necessary information and understanding to guide future watershed management decisions.

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9. LIST OF ACRONYMS AND ABBREVIATIONS

BPA ..... Bonneville Power Administration
CIP ..... Capital Improvement Projects
Corps ..... U.S. Army Corps of Engineers
CMZ ..... Channel migration zone
C/WCD ..... Cowlitz/Wahkiakum Conservation District
CWCOG ..... Cowlitz Wahkiakum Council of Governments
Ecology ..... Washington Department of Ecology
FCRPS ..... Federal Columbia River Power System
FPR ..... Forest Practices Rules
Ft ..... Feet
IMW ..... Intensively Monitored Watershed
ISTM ..... Integrated Status and Trends Monitoring
LCEP ..... Lower Columbia Estuary Partnership
LCFEG ..... Lower Columbia Fish Enhancement Group
LCFRB ..... Lower Columbia Fish Recovery Board
LID ..... Low Impact Development
LWD ..... Large Woody Debris
OHWM ..... Ordinary High Water Mark
MOA ..... Memorandum of Agreement
NF ..... North Fork
NGOs ..... Non-governmental organizations
NOAA ..... National Oceanographic and Atmospheric Administration
NPDES ..... National Pollutant Discharge Elimination System
NRCS ..... Natural Resource Conservation Service
PUD ..... Public Utility District
RM ..... River Mile
RM&E ..... Research, Monitoring, and Evaluation
SMP ..... Shoreline Master Program
SRS ..... Sediment Retention Structure
TWC ..... The Watershed Company
UGA ..... Urban Growth Area
USFS ..... United States Forest Service
USFWS ..... U.S. Fish and Wildlife Service
WAC ..... Washington Administrative Code

WDFW .....Washington Department of Fish and Wildlife
WDNR .....Washington Department of Natural Resources
WRIA .....Water Resource Inventory Area