



COWLITZ WILDLIFE AREA

2014 MANAGEMENT PLAN UPDATE

Washington Department of Fish and Wildlife

Land Management Summary



Gibbs Lake (background) purchased in 2011

This is an update to the 2006 Cowlitz Wildlife Area Management Plan that provides management direction for the 14,217 acres of Wildlife Area lands and the additional 1,859 acres of wildlife habitat that is protected from development through a conservation easement. All lands are located within Lewis County. The plan identifies management objectives and guides the implementation of strategies based on the Washington Department of Fish and Wildlife (WDFW) Mission of “Sound Stewardship of Fish and Wildlife Resources” and its underlying statewide goals and objectives as they apply to local conditions. Additionally, the plan

guides activities that fulfill Tacoma Power’s FERC requirements to mitigate for the habitat loss due to inundation by Riffe and Mayfield Lakes.

The Management Plan is updated as habitat conditions and species needs change, as new regulations and scientific knowledge are developed, as public issues and concerns evolve, and as administrative policy regarding Wildlife Areas change.

UPDATES / CHANGES

Tacoma Power has hired an individual whose primary duties include producing a vegetation inventory as well as a vegetation management plan for the Peterman Unit of the Wildlife Area. This inventory and management plan is specific to timber on the unit as Tacoma Power retains forestry responsibilities under the Settlement Agreement Relating to Wildlife for the Cowlitz Hydroelectric Project (Settlement Agreement). WDFW is collaborating with Tacoma Power on this project to ensure that wildlife needs are included in any decision to conduct forestry activities under this management plan. This is an activity that will improve the ability of WDFW to manage the resources on the Peterman Unit in a manner that is beneficial to wildlife and forest health and is also socioeconomically responsible and consistent with common forestry practices. A 160 acre

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commercial thin is scheduled for 2014 to reduce tree density, canopy cover, and promote diversity on the forest floor.

The Cowlitz Wildlife Area (CWA) has taken a new approach to dealing with the beaver issues that have plagued the Mossyrock Unit for years. These industrious builders have thwarted every effort to keep them from damming the ditches supplying the ponds with water as well as the standpipes that maintain the pond water levels. In 2013, CWA staff built and installed a version of the Clemson Pond Leveler on one of the ponds that has had the most beaver activity and have mowed the brush from the banks of the ditch. The leveler is submerged and is built such that water current is negligible if not non-existent. The pond level is controlled by the use of a standpipe. The standpipe is protected within the old water control structure so no matter how much debris the beaver piles around or in the standpipe the water flow will not be impeded.



Clemson Pond Leveler – Mossyrock

NEW ISSUES

No new issues at the time of this update.

MAJOR STEWARDSHIP ACCOMPLISHMENTS

Conservation Easement Purchase

Since the last update in 2012 one new acquisition has been added to the Wildlife Area. The acquisition is in the form of a conservation easement (CE) between Olympic Resources Management (ORM) and Tacoma Power with WDFW managing the 1,859 acres. The CE protects the land from future development as well as securing walk-in recreational access for the public. The acquisition account is now depleted of funds and no further acquisitions are planned. WDFW has identified additional lands that would benefit from protection through a CE and will assist Tacoma Power if they choose to pursue purchase of additional CE lands.

Kiona Ditch Maintenance and Culvert Replacement



Kiona Unit Ditch -- Winter 2013 / 2014

This project restored 2,580 feet of drainage ditch to working order and replaced 2 plugged undersized culverts. Reed canarygrass, siltation, and sedimentation were preventing proper flow and causing impounding of the water within the ditch. The result of this impounding increased water levels that overflowed the banks of the ditches and flooded the adjacent agricultural fields. The flooding was persistent and prevented management of the fields for winter waterfowl and elk forage. Monitoring the project site during the winter of 2013 and 2014 (a very wet winter) showed shallow ponding within the fields and the ditches functioning properly.

Kosmos Gate Installation

A gate and a 30' x 30' pull out were installed along the old road known locally as the Old Glenoma Highway. This "road" extends into the Kosmos Unit of the Wildlife Area to the old Kosmos town site. Vehicular traffic was restricted beyond this point since 1995 by the use of ecology blocks and signage to protect cultural resources, prevent wetland habitat destruction, and prevent wildlife harassment. This became more challenging in recent years due to vandals moving the ecology blocks and erosion around the old bridge. When the ecology blocks were removed, a potentially dangerous situation arose as a vehicle could mistakenly drive into Frost Creek not realizing the road across the bridge was eroded away. The installation of the gate blocked vehicular access to an additional 1,600 feet but mitigated the hazard to the public, continued meeting the objectives of the management plan, and did not appreciably restrict public use. Public access is preserved by seasonally opening the gate when water levels on the reservoir prevent vehicular access to the area near the bridge.



Kosmos Gate on the Old Highway

Allen Barn Improvements

Vandalism, break-ins, and thefts brought the Allen Barn's security into question. As a result, improvements were necessary to increase security and functionality. Two new sliding doors on the west end of the barn were built to replace the old ones that had been damaged by vandalism and electrical service as well as the installation of interior and exterior lighting. The doors were installed with new hardware and locking mechanisms.

CWA staff installed a French drain along the perimeter of the north wall to alleviate the flooding that was occurring on the inside of the barn. Also, a graveled approach to the barn from Davis Lake road was installed. The installation of a gravel floor within the 4,320-square foot barn is approximately 80 percent complete.

Peterman Culvert Removal

The CWA staff successfully submitted three major Road Maintenance and Abandonment Plan (RMAP) projects for environmental permitting. Two of the RMAP projects were completed in 2013. The culvert removals on the 1540 and 3000 roads were removed and the roads beyond the culverts were abandoned according to Forest Practice Standards. The culvert removal on the 1090 Road (West Road) was permitted but due to unresolved road access issues between Tacoma Power and private landowners, the project was not started. It is anticipated that the issues will be resolved in 2014 and the project completed.



1540 RD Culvert Removal

STATUS REPORT OF 2012 PERFORMANCE MEASURES

Key performance measures are identified each year to monitor progress and identify any issues that might interfere with planned priority activities. This information will be used to delete, add or alter priority strategies. The following are the key performance measures identified in 2012 and their status at the end of the year.

2012 Performance Measure	Status of Performance Measure
Cowlitz Trout Hatchery	
Decrease the density and extent of the persistent populations of scotch broom and perennial pea.	Objectives were met (~ 3 acres). As these populations are persistent, new plants are treated as necessary.
Swofford Pond Unit	
Conduct maintenance activities on the Swofford Pond Trail.	Objectives were met
Repair / replace the boardwalks on the South Shore Trail.	Objectives were met
Mossyrock Unit	
The dike and water control structure on the large pond are in need of major repairs.	This project is still in planning. The repairs identified to restore this pond may not be cost effective. CWA staff continues to look for a cost effective solution to meet project objectives.
Maintain vegetation along the banks of the ditches supplying and draining the Unit's ponds	Objectives were met
Repair breaches in the banks between the ponds and ditches.	Due to other priority projects, the breaches located in 2012 were not repaired.
Kosmos Unit	
Maintain the Clevenger Road, a necessary agricultural road.	Objectives were met
Davis Lake Unit	
Spray an 8 foot swathe around the Allen Barn for fire protection.	Objectives were met
A French drain needs to be installed on North side of the Allen Barn.	Objectives were met
Peterman Ridge Unit	
Using chemical and mechanical methods to control vegetation along approximately 5 miles of road.	Objectives were met (24 miles).
Begin work abandoning the small spurs and landings identified in the SEPA checklist.	Wildlife Area, Tacoma Power, and Green Diamond staff met to discuss collaboration on this project.

Kiona Unit	
Prepare a plan to clean out agricultural ditches and acquire necessary permits.	All the necessary environmental permits were acquired for this project. Only one bid was received and it exceeded the project's budget. The project was not awarded.
Spears Unit	
Fill and maintain the 27 acre mill pond at capacity. Dike Road Vegetation Management	CWA staff operated a 6-inch pump in accordance with the water and impoundment right. No leaks in the dike were observed. 2012 objectives were met.

STATUS REPORT OF 2013 PERFORMANCE MEASURES

The following are the key performance measures identified in 2013 and their status at the end of the year.

2013 Performance Measure	Status of Performance Measure	Explanation of Progress 2014-15 Related Activity Comments
Cowlitz Trout Hatchery Unit		
Invasive vegetation management	Work was accomplished as planned.	This site has a prolific seed bank. Monitoring occurs annually and control occurs as needed.
Swofford Unit		
Swofford Pond South Shore Trail annual maintenance	Work was accomplished as planned.	Annual activity
Invasive vegetation management	Work was accomplished as planned.	Monitoring occurs annually and control occurs as needed.
Mossyrock Unit		
Mossyrock dike and water control structure maintenance and repair.	No major work was accomplished on this project in 2013.	Restoring the failed structure to previous conditions is not cost effective. Alternative methods are being researched for a more cost effective solution.
Mossyrock ditch and pond maintenance.	Work was accomplished as planned.	Banks were mowed and brush removed. Beaver dams were removed from within the ditches and a pond leveler installed.
The culvert crossing on the Mossyrock Unit's lower timber clearing road project.	Project Completed	WDFW secured the necessary environmental permits. Tacoma Power has taken the lead. WDFW will assist Tacoma Power when a larger culvert is installed.
Kosmos Unit		
Improve the Clevenger Road to provide parking and facilitate access to Rainey Creek.	Work was accomplished as planned.	CWA staff continues to maintain the road's status quo as a walk-in road while searching for alternative funding sources to upgrade the infrastructure.

Construct the Rainey Creek non-motorized trail.	Work was accomplished as planned.	A request for archeological evaluation has been submitted to Tacoma Power and the location has been flagged and chemically mowed.
Davis Lake Unit		
Infrastructure improvements and Maintenance	Work was accomplished as planned.	The clay soils used to backfill the French drain were removed and replaced with drain rock. A driveway was constructed.
Invasive vegetation management	Not necessary in 2013	The 3-acre timber clearing shows signs of preferential use but will likely need a chemical application for blackberry in 2014.
Peterman Ridge Unit		
Peterman vegetation control on roads to maintain passage and Forest Practices compliance.	Work was accomplished as planned.	Approximately 5 miles of priority road was treated.
Peterman Road Abandonment and Maintenance Projects (RMAP).	Permits were acquired for three projects and two were completed	Two RMAP culverts were removed and one was delayed by unresolved access issues between Tacoma Power and the owners of a private inholding. The issues are expected to be resolved in 2014.
Kiona Unit		
Kiona Creek Agricultural Ditch Maintenance	Project is approximately 90 percent complete.	The work window protecting fish closed, leaving about 10 percent of the project left to be completed in 2014.
Spears Unit		
The Spears Mill Pond Project.	No major work was accomplished on this project in 2013.	CWA staff researched using a solar powered pump system for filling and maintaining the pond. However, from a feasibility and security standpoint, having electrical service from the PUD is more practical.
Invasive vegetation management	Work was accomplished as planned.	This site has a prolific seed bank. Monitoring occurs annually and control occurs as needed.
Road vegetation management	Work was accomplished as planned.	The vegetation within the road prism and adjacent to the pond along the banks was mowed to discourage burrowing mammal use.

NEW STRATEGIES

The Wildlife Area plan identifies many strategies or activities to address the Agency's Strategic Plan goals and objectives, why the area was purchased, habitat conditions, species present and public issues and concerns. The following updated strategies have been added to respond to

previously unaddressed or new issues or changes on the Wildlife Area. New strategies may also be in response to adaptive management as staff evaluate the impacts of past management activities. Strategies identified in italics are responses to issues provided through the Citizen Advisory Group (CAG) meetings.

Note to the reader/reviewer: No new or updated strategies are being proposed at this time.

2014-15 PERFORMANCE MEASURES

Performance measures for the Cowlitz Wildlife Area are listed below. Accomplishments and progress toward desired outcomes will be monitored and evaluated annually.

Cowlitz Trout Hatchery Unit:

- The populations of Scotch broom (*Cytisus scoparius*) and perennial pea (*Lathyrus latifolius*) just off Spencer Road were chemically treated in 2011, 2012, and again in 2013. As expected the seed bank produced a flush of juvenile plants in the spring of 2012 and new juvenile plants were again observed in 2013. The plants were treated using a targeted approach to minimize damage to the otherwise diverse plant community.
 1. Continue to monitor the site for new plants and treat as necessary with an emphasis towards eradication of the populations of Scotch broom and perennial pea using integrated vegetation management (IVM) control practices.

Swofford Unit:

- Annual maintenance to remove trees that fall during winter months and brush back encroaching vegetation is ongoing on the Swofford Pond Trail. The boardwalks over wet areas of the trail need periodic maintenance and occasionally new boardwalks may be needed or old ones replaced.
 1. Employ a Department of Natural Resources Inmate Crew to perform the necessary maintenance on the trail and maintain or replace boardwalks as necessary.
 2. If necessary and if scheduling permits, utilize a Department of Natural Resources (DNR) crew to install additional boardwalks on the trail.
- CWA staff will conduct weed management activities.
 1. Monitor and continue to decrease the density and extent of the Scotch broom population using integrated vegetation management (IVM) control practices.
 2. In July, when any existing purple loosestrife plants should be in bloom, CWA staff will conduct a survey of the shoreline and look for any reoccurrences. Observed plants will be hand pulled at that time if possible.
 3. Assist Tacoma Power with control efforts on the populations of yellow flag iris because the plant straddles both aquatic and shoreline habitats. A control plan will be designed with Tacoma Power.
- Tacoma Power will continue aquatic weed control efforts as necessary.

Mossyrock Unit:

- The small dike and water control structure impounding this unit's largest pond is failing to hold water. The metal culvert is leaking due to attrition and the dike has been undermined with animal burrows compromising the dike's integrity. Because of these issues, no water is currently being retained behind the dike. The CWA staff is actively assessing various solutions and improvements.

1. The CWA staff expects that rebuilding the infrastructure with the existing specifications will prove to be costly and perhaps cost prohibitive. CWA staff will continue to work with WDFW habitat engineers to develop project specifications and detailed plans that will meet objectives to provide open water habitat.
- Conduct maintenance on ditches, banks, and water control structures supplying and draining the Unit's ponds.
 1. Using a DNR inmate crew and IVM techniques, maintain vegetation along ditches, dikes, and pond edges to discourage burrowing mammal activity.
 2. Repair breaches in the berms between the ponds and ditches as necessary to maintain the ability to fill the ponds.
 3. Install beaver deceivers as needed around control structures.
 - In 2013, Tacoma Power made repairs to the transmission line access road, including reestablishing flow to the existing culvert and adding an overflow culvert. This road accesses the habitat clearings near the power line corridor. To prevent future road failure due to occasional high stream flows, Tacoma Power and the CWA will be addressing long term replacement of this culvert.
 1. Assist Tacoma Power project staff as necessary to retrofit the culvert crossing.

Kosmos Unit:

- Recreational Access Enhancement Activities.
 1. Erosion and tree roots have compromised the old Clevenger road, shoulders, and ditches. CWA staff will continue to look at long term restoration options to allow vehicle access by the public and will conduct maintenance on this road to maintain walk-in access.
 2. CWA staff will improve recreational non-motorized access by continuing the project to construct a system of trails beginning near the Rainey Creek footbridge at the end of the Clevenger Road.
- Forage Field Vegetation Management.
 1. Continue to rehabilitate the north field by mowing and chemically controlling the encroaching blackberry.
 2. Chemically control broadleaf weeds (i.e. thistle) in the two fields south of Rainey Creek.
 3. Chemically control broadleaf weeds (i.e. thistle) and blackberry in the field north of Frost Creek and the field will be disked, harrowed, and top dressed with a wildlife forage seed mix.
- Kosmos Access Area parking lot activities.
 1. The informational kiosk's informational material will be replaced as needed.
 2. Grade the parking lot to repair potholes and ruts. Rock the parking lot if needed. Paint the interior and exterior of the restroom facility.
 3. Continue to maintain signs and markers delineating vehicle access areas and to patrol the area for violations.

Davis Lake Unit:

- Improvements to the barn and grounds to facilitate the utilization of the structure for storage and shop activities.

1. CWA staff will spray around the barn to maintain a vegetation-free boundary for fire protection. Rock will be distributed to protect the ground from soil erosion.
 2. Finish rocking the floor of the barn.
 3. Spray the gravel driveway for weed control as necessary.
- Forage Field Vegetation Management.
 1. Monitor and control invasive blackberry and Scotch broom as needed.

Peterman Ridge Unit:

- Vegetation control on roads to maintain passage and DNR Forest Practices compliance.
 1. Using chemical and mechanical control methods, maintain approximately 5 miles of road.
- Road Abandonment and Maintenance Projects
 1. Continue work abandoning the small spurs and landings identified in the State Environmental Policy Act (SEPA) checklist working with the parties that have responsibility in the shared road agreement. When possible, these roads will be abandoned as a collaborative effort with Green Diamond Resource Company (GDRC) as they release roads back to Tacoma Power per their timber reservation agreement.
 2. Assist Tacoma Power in implementing negotiated measures to permit access to the private inholding (West property) on the 1090 Road. Once a decision has been made, remove the existing culvert according to the Forest Practices Application (FPA) permit.
 3. Work collaboratively with Tacoma Power and GDRC to have a gate installed at the bridge on the 1700 Road per recommendations discussed as a result of the opening of the 1705 road.
- Silvicultural Practices – Thinning
 1. Assist Tacoma Power in managing the commercial thinning of approximately 160 acres located in T12 R4E Section 8.
 2. Assist Tacoma Power in managing the pre-commercial thinning of selected units.

Kiona Creek Unit (formerly known as Smathers Unit):

- Agricultural Ditch Maintenance
 1. Secure a Hydraulic Permit Approval (HPA) extension and complete the project to clear the agricultural ditches that drain the wildlife fields which were “choked” with vegetation. The remainder of the work is mostly aesthetic “clean-up” work such as grading the road’s surface and “smoothing” the ditch spoils so as to be incorporated into the adjacent fields.
- Forage Field Management
 1. Chemically control reed canarygrass on 12 acres of field. Replant the 12 acres with a forage mix appropriate for wildlife.

Spears Unit (formerly known as Gibbs Lake):

- The Spears Mill Pond Project.
 1. CWA will continue with the effort to fill / maintain the 27-acre pond to maximum capacity. Water rights and an impoundment permit are in place for this site. The CWA staff will actively pump water from adjacent Siler Creek if it is determined

necessary to meet objectives. Localized winter flooding will determine if pumping is necessary. Once optimal water levels are reached and maintained, the woody vegetation is expected to die back allowing for more open water habitat. This project is intended to enhance the habitat available for wintering waterfowl.

2. The CWA will have Lewis County install electrical service and a mobile pump will be deployed to maintain water levels throughout the year as necessary.
- Invasive Vegetation Management
 1. Persistent populations of Scotch broom, Japanese knotweed, and blackberry can be found on this site. CWA staff will continue to treat (as necessary) existing vegetation and monitor for new occurrences.
 - Road Management
 1. The road will be mowed and sprayed to control encroaching vegetation.

WILDLIFE AREA ADVISORY COMMITTEE INPUT

A Wildlife Area Advisory Committee (WAAC) meeting was held on April 29, 2014. The purpose of the WAAC meeting is to review management's progress, address any new issues, and receive input on existing issues. This year's meeting was well attended with only the Horseman's Association not being represented. Input was heard from several individuals and the issues have been summarized below.

Attendees (affiliations):

Lewis Co. Wind Surfing Assoc.	Lewis County Weed Board	Local Citizens
Cloud Base Hang Glider Assoc.	WDFW – Region 5	Adjacent Landowners
Cattlemen's Association	Department of Nat. Resources	

The following new input / issues were addressed at the meeting.

Issue: Will the Peterman Vegetation Inventory and Management Plan include noxious weeds? If not we would like it to address noxious weeds.

Response: This is a Tacoma Power project. We are currently assisting Tacoma in a technical capacity and are not tasked with identifying the specific species and/or elements of the plan. However, we will forward this request to Tacoma.

Issue: Have you considered using a floodgate on the Spears pond to at least partially capture high water events to reduce overall costs of maintaining the pond at capacity.

Response: This is a great idea and WDFW will look at whether or not this is a solution that can be implemented as a part of the overall project.

Issue: Will there be any new acquisitions in the future?

Response: There are currently no plans for future acquisitions. CWA staff continues to monitor those properties that are contiguous to the Wildlife Area or fall within the initial targeted lowland / wetland areas. However, there is no funding left in the acquisition fund so if a high quality property became available a funding source would need to be identified for an acquisition to occur.

Issue: **Has Tacoma Power’s mitigation requirements for acquisition been met? Is there a limit to how much property can be purchased for mitigation?**

Response: Yes, Tacoma Power has met the mitigation requirements for acquisition. There is no limit to how much land Tacoma Power could purchase to provide mitigation for their hydroelectric project on the Cowlitz River. Lands sought for acquisition would be high quality lands that lie contiguous to the Wildlife Area or lie within the targeted areas provided by the Wildlife Management Coordinating Committee (WMCC) following the 1993 Wildlife Settlement Agreement between WDFW and Tacoma Power. The acquisition account that was originally provided for acquiring mitigation properties has been depleted.

Issue: **Do you foresee other improvement projects on the Spears Unit (i.e. access) in association with the mill pond?**

Response: There is very good likelihood of additional improvements to access providing we can establish stable water levels within the pond. That being said, the gates were installed to prevent dumping on the backside of the pond. This was historically a favorite location for the dumping of cars, tires, and household garbage.

Issue: **Is there anything that can be done to help deter / alleviate the garbage that begins to pile up on the Dogpatch area of the Kosmos Unit especially during the late summer months (i.e. dumpsters)?**

Response: This is a tough one. If we place dumpsters on the Wildlife Area (and we have) the exact opposite occurs. This actually increases dumping as people begin bringing household garbage to the dumpsters. We do actively prosecute individuals for dumping when we can find identifying information within the debris.

Issue: **Does the bathroom at Dogpatch get serviced?**

Response: Yes, we have a contractor that services the vault toilet every Thursday.

Issue: **Is there any chance that you (WDFW) will get trail maintenance responsibilities back on the Mossyrock trail?**

Response: No, however; there is a new individual working for Tacoma Power and they are considering using DNR inmate crews to do trail work on their trails. We will share this issue with them. This may solve this problem.

Issue: **So you are writing a new management plan. Will there be major changes such as how you manage Dogpatch?**

Response: No. Most of the changes you will see within the new management plan will be how we conduct activities on the Wildlife Area to ensure that best management practices are followed. Additionally, there will be guidelines for managing healthy forests and future climate changes.

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Want to see the full plan?

Go to –

<http://wdfw.wa.gov/publications/pub.php?id=00466>