



# COWLITZ WILDLIFE AREA 2012 MANAGEMENT PLAN UPDATE

Washington Department of Fish and Wildlife



**Gibbs Lake (background) purchased in 2011**

## Land Management Summary

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 located in 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 to fulfill Tacoma Power’s FERC requirements to mitigate for the habitat loss due to inundation by Riffe and Mayfield Lakes, caused from the Mayfield and Mossyrock dams.

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

Since the last update in 2009 only one new acquisition has been added to the wildlife area. The parcel, known as Gibbs Lake, added 31 acres to the Spears Unit. However, WDFW and Tacoma Power met several times in 2010 and began discussing some innovative opportunities to expend the acquisition funds for the benefit of wildlife including a possible conservation easement. At this time it is still premature to report on any progress as purchase decisions have not yet been finalized through our Real Estate Division.

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Kiona Creek runs along the wildlife area boundary on the southern border of the Kiona Unit confined behind a small dike. Orthophotos indicate the natural location flowed diagonally in a



**Culvert on the Kiona Unit replaced after flooding**

northwesterly direction across the unit meeting up with Squaw Creek near the center of the unit. A major flood event occurred during the winter of 2008-09 causing extensive flooding and massive destruction throughout the Cowlitz River Valley particularly from Morton east. Kiona Creek left its channel braiding out across private property generally following what is believed to be its historic location becoming confined within an agricultural ditch on the wildlife area that outlets into Squaw Creek. An undersized culvert was compromised and blown out due to the very high flows. That culvert was upgraded to support the increased flows. Kiona Creek was left to naturally grade and find its own way across the landscape.

During the winter months of 2010-2011, the barn on the Davis Lake unit was burglarized at least two times. To this date none of the items have been recovered and measures were taken to increase the security of the barn. Among the measures taken to increase security was the installation of electrical service, security lighting and upgrades to the locking mechanisms on the entry doors.



**Standpipe to control water levels on Spears Unit**

The structure controlling the water levels on the mill pond on the Spears unit had failed due to corrosion and was replaced. A water right and an impoundment permit are in effect for this location. Active pumping to maintain water levels is conducted through the use of a portable pump but most recharge in the pond is supplied through seasonal winter flooding.

**NEW ISSUES**

No new issues at the time of this update.

**MAJOR STEWARDSHIP ACCOMPLISHMENTS**

In 2011 the Peterman Hill Unit had five culverts removed, four bridges were installed and 0.4 mile of road was abandoned. These projects are Road Maintenance and Abandonment Plan (RMAP) projects that provide fish passage and resource protection. With the completion of these projects most of the major RMAP issues have been resolved.



**Bridge installed as RMAP culvert replacement**



**Brim Bar Side Channel Rehabilitation Project**

The Brim Bar Side Channel Rehabilitation project lead by the Lower Columbia Fish Recovery Board and sponsored by the Cowlitz Tribe will benefit coho salmon, fall Chinook, winter steelhead and chum. The project enhanced a side channel of the Cowlitz River at Brim Bar on the Cowlitz Trout Hatchery unit of the wildlife area to improve the quality of both the riparian and instream habitats as well as improve volitional access by fish. Engineered log jams were constructed to improve scour and flow and large woody debris was placed to provide complexity to instream habitat for salmonids during all life stages.

The project, known as the Davis Lake Field Drainage Project, to recover the use of historic agricultural fields was completed in 2011. The project facilitates the management of the fields to restore vigor and palatability to encourage elk use on wildlife area lands and provide optimal migratory waterfowl habitat. These lands are still functional wetlands with a hydroperiod typical of winter seasonal flooding.



**Davis Lake Field Drainage Maintenance Project**

### **STATUS REPORT OF 2010 PERFORMANCE MEASURES**

A management plan update was not produced in 2010. The following are the key performance measures identified in 2010 and their status at the end of the year.

2010 Performance Measure	Status of Performance Measure
Mechanically treat six miles of road on Peterman Hill to control roadside vegetation	2010 objectives were met (approx. 14 ac.)
Continue improving the wintering waterfowl habitat on the Mossyrock Ponds.	Work was accomplished as planned.
Continue enhancements on the Mossyrock Unit's lower timber clearings (6 acres).	Due to failure of a culvert and an inability to access the area, no major work was accomplished on this project in 2010.
Conduct chemical applications on the Kosmos Unit (~12 acres).	Objectives were met.
Complete three Federal Emergency Management Agency funded projects resulting from flooding during the 2008-09.	Two of the 3 projects were completed. The Kiona unit culvert was postponed until 2011.
Continue enhancements on approximately 20 acres of forage fields on the Davis Lake Unit.	Objectives were met.
Conduct annual weed control activities in accordance with legal requirements and guided by the weed management plan.	Objectives were met. (approx. 20 ac.)
Conduct the annual maintenance on 74 artificial cavity nest boxes.	Objectives were met.
Continue working with Tacoma Power on the forest thinning prescription plan for Peterman Hill.	Ongoing and will continue in 2011
Conduct annual field maintenance activities in accordance with the field maintenance plan.	Objectives were met.
Prepare burn plans for submittal to the Department of Natural Resources for permits to conduct habitat restoration burns on several units of the Cowlitz Wildlife Area.	Ongoing and is dependent on the ability to gain access to the fields for planning purposes. Access was not possible in 2010.
Conduct maintenance activities on the Swofford Pond Trail.	Objectives were met.
Begin the Spears Unit project (if the ground is dry enough to access the site) to maintain the ditch and breach the south side of the dike along the channel known as —Channel A in accordance with the plan outlined in the Joint Aquatic Resource Permit Application, Hydraulic Project Approval and other permit restrictions.	This is an ongoing project. Work began in 2010 and will continue to be an active project in 2011.

**STATUS REPORT OF 2011 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 for 2012.

<b>2011 Performance Measure</b>	<b>Status of Performance Measure</b>	<b>Explanation of Progress 2012-13 Related Activity Comments</b>
Swofford Pond South Shore Trail annual maintenance	Work was accomplished as planned	Annual activity
Mossyrock dike and water control structure maintenance and repair	No major work was accomplished on this project in 2011.	Engineers were consulted and a cost estimate produced. Funding was not available.
Mossyrock ditch and pond maintenance	Work was accomplished as planned	A couple of breaches were discovered and will be fixed in 2012. A small riser needs to be replaced.
The culvert crossing on the Mossyrock Unit's lower timber clearing road project.	No major work was accomplished on this project in 2011.	WDFW secured the necessary environmental permits. Tacoma Power has taken the lead.
Improve the Clevenger Road to provide parking and facilitate access to Rainey Creek.	No major work was accomplished on this project in 2011.	Engineers were consulted and a cost estimate produced. Funding was not available.
Continue the Davis Lake Unit project to clean and maintain ditches to improve habitat conditions for elk and wintering waterfowl.	Project Completed	See <a href="#">Major Stewardship Accomplishments</a> for more information.
The Davis Lake Unit Barn Maintenance and Repairs.	Work was accomplished as planned.	See <a href="#">Updates / Changes</a> for more information.
Peterman vegetation control on roads to maintain passage and Forest Practices compliance.	Work was accomplished as planned.	Approximately 43 miles of road was treated. This is an ongoing project and will continue again in 2012. (approx. 12 ac.)
Peterman Road Abandonment and Maintenance Projects (RMAP).	Work was accomplished as planned.	Ongoing activity. See <a href="#">Major Stewardship Accomplishments</a> for more information.
2009 Flooding – Kiona Creek Channel Relocation.	Project Completed	See <a href="#">Updates / Changes</a> for more information.
The Spears Mill Pond Project	Work was accomplished as planned.	See <a href="#">Updates / Changes</a> for more information.
Conduct annual weed control activities in accordance with legal requirements and guided by	Work was accomplished as planned.	Annual activity. There was a population of yellow flag iris discovered and treated on Swofford Pond.

the weed management plan.		Monitoring for aquatics will continue on Swofford Pond. (approx. 118 ac.)
Write the annual performance report for Tacoma Power as per the Wildlife Settlement Agreement.	The plan was written and submitted for 2011	Annual activity
Conduct annual field maintenance (~200 acres) in accordance with the field maintenance plan.	The 2011 objectives were met	Annual Activity
Conduct maintenance on the Kosmos and Swofford public access sites. Road surface and pothole repair.	Work was accomplished as planned	Annual Activity
Spears Restoration Project	No major work was accomplished on this project in 2011.	All environmental permits are in place. It was hypothesized that beaver activity may be more responsible for the artificial impounding of water than the berm along Siler Creek. Some dams have been removed and it remains to be seen if the results are positive.

**NEW STRATEGIES**

The wildlife area plan identifies many strategies or activities to address the agencies 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.

**2012 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. Since these are well established plants amongst an otherwise diverse

community a targeted approach was utilized to minimize killing desired species. The results were quite favorable but the seed bank is expected to produce a flush of juvenile plants in the spring.

Monitor the site for new plants and continue treatment to decrease the density and extent of the persistent populations of Scotch broom and perennial pea using integrated vegetation management control practices.

### **Swofford Unit:**

The South Shore Trail will need annual maintenance to remove trees that fell during winter months and brush back encroaching vegetation. Boardwalks over wet locations need to be repaired and or replaced if scheduling permits.

- Employ a Department of Natural Resources Inmate Crew to perform the necessary maintenance on the trail.
- If scheduling permits, utilize a DNR crew to repair / replace the boardwalks on the South Shore Trail.

### **Mossyrock Unit:**

The dike and water control structure on the large pond is in need of major repairs. The metal culvert is leaking due to attrition and the dike has been undermined with animal burrows. Because of these issues, no water is currently being retained behind the dike.

- Wildlife Area staff will continue to work with WDFW habitat engineers to develop project specifications and detailed plans.

Perform annual maintenance on ditches supplying and draining the unit's ponds.

- Chemically treat encroaching vegetation along ditches and dikes.
- Repair the small breaches in the berm between the pond and ditch that has compromised the ability to fill the ponds.

### **Kosmos Unit:**

Clevenger Road, a necessary agricultural road, is in need of maintenance.

- Erosion and tree roots have compromised the existing road, shoulders and ditches. Wildlife Area staff will look at options and develop a plan to conduct maintenance on this road.

### **Davis Lake Unit:**

The barn used for storage on the property is in need of repairs and maintenance.

- Wildlife Area staff will spray an 8 foot swath around the barn to remove persistent vegetation from encroaching on the barn creating a fire hazard. Rock will be distributed to protect the ground from soil erosion once vegetation has been controlled.
- Wildlife Area staff will install a French drain along the outside of the north wall to prevent water from flowing under foundation into the interior of the barn.

### **Peterman Ridge Unit:**

Vegetation control on roads to maintain passage and Forest Practices compliance

- Using chemical and mechanical control methods maintain approximately 5 miles of road.

Road Abandonment and Maintenance Projects

- Begin work abandoning the small spurs and landings identified in the SEPA checklist. These roads will be abandoned as a collaborative effort with Green Diamond Resources as they release roads back to Tacoma Power per their timber reservation agreement.

**Kiona Creek Unit (formerly known as Smathers Unit):**

Agricultural Ditch Maintenance

- The agricultural ditches have become “choked” with vegetation. Wildlife Area staff will look at options and acquire any necessary environmental permits.

**Spears Unit (formerly known as Gibbs Lake) - The Spears Mill Pond Project**

- Wildlife Area staff will continue with the effort to fill the 27 acre pond to maximum capacity. A water right and impoundment permit are in place for this site. Staff will actively pump water from the 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.

Dike Road Management

- The road needs to be mowed and sprayed to control encroaching vegetation.

**CITIZENS ADVISORY GROUP INPUT**

A Citizens Advisory Group (CAG) meeting was held on April 27, 2012. The purpose of the CAG 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 County Wind Surfing Association | Local Citizens      |
| Cloud Base Hang Glider Association    | Adjacent Landowners |
| Cattleman Association                 |                     |
| Lewis County Weed Board               |                     |
| WDFW – Region 5                       |                     |

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

- Issue:** Will the Spears Mill pond be planted with fish?  
**Response:** The Cowlitz Wildlife Area supports a stocking program on the Spears Mill Pond. Once it has been determined that the pond will maintain water levels the Fish Program will determine the feasibility of a stocking program. They will also determine the types of fish and the rate at which they will be stocked.
- Issue:** Does the Cowlitz Wildlife Area look at historic Native American presence prior to beginning a project?  
**Response:** Yes, Native American presence in the Cowlitz River drainage is well documented. Much of the land comprising the Cowlitz River Hydroelectric Project has been surveyed. There are State and Federal laws that mandate the protection of historic and



archeological resources. Agency policy requires a cultural resource inventory on any project involving digging in undisturbed soils.

**Issue:** Kiona Creek is flowing through the wildlife area ditches. What work have we done on the ditches? Where does Kiona Creek leave its channel and begin to braid?

**Response:** Since the flooding that occurred the winter of 2008-09 a portion of Kiona Creek has been flowing out of its channel approximately 100 yards downstream of the bridge over Kiona Road. Once it leaves its channel it braids out across private property following a route that closely follows the historic channel until it flows into an agricultural ditch on the wildlife area. A culvert has been upgraded to handle the increased flows. Additional projects are being considered that will upgrade / maintain the ditches and further connect Kiona Creek to its former historical channel within the wildlife area.

**Issue:** Additional roads will be abandoned on Peterman Hill. Are the roads open to hunting? Will the abandonments be contracted out? What standards will be used for the abandonments? Will a weed inventory be done before roads are no longer passable?

**Response:** Peterman Hill has over 75 miles of road within ~6,800 acres and all are open for walk-in hunting and many of the gated roads are open during the hunting season once the threat of fire danger has passed. Under the management plan for the Cowlitz Wildlife Area road densities will be reduced to approximately 1.5 miles of “open” road per square mile of land. The roads proposed for abandonment have been identified as not necessary for operational purposes and their abandonment will have no real negative effect on public access while providing positive benefits to wildlife. The work proposed to “officially” abandon these roads will meet Forest Practice Standards and consist of controlling sediment delivery by installing water bars as needed, removing culverts and providing ditch relief prior to a connection to fish bearing waters. Additionally, access by vehicular traffic will be prevented and the plant community will be allowed to naturally regenerate in the area. It is the policy to control or eradicate “weeds” on all units of the wildlife area. Roads into areas with known invasive populations will not be abandoned as they would be considered necessary for operational purposes. There are three categories of roads (Green Diamond operations, shared, and wildlife) that define maintenance responsibility on the Peterman roads. The abandonment work will be done as a cooperative project between WDFW and Green Diamond Resource Company according to maintenance category. Wildlife roads are the sole responsibility of WDFW and the abandonments may be contracted out, though no contracts are currently out for bid.

**Issue:** The Recreation Conservation Office - Washington Wildlife and Recreation Program project planned for Swofford will add infrastructure. How big will the parking area be? What permits will be required? Were other spots considered? What measures will be taken to protect pedestrians? Will the project be Americans with Disability Act (ADA) accessible?

**Response:** The Swofford Pond Fishing Access project site was chosen because it provides a flat topography to facilitate ADA accessibility, a suitable site for a four car parking lot with a pad for a portable restroom. Bathymetry data shows the existence of a channel where the proposed dock is to be sited. Preliminary consultations with county indicate that in addition to building permits and environmental permits the project will require a permit to work within the rights of way, a fill and grade permit, and an approach permit. The

project will be planned / engineered to ensure safety of those who utilize the new facilities. The site location facilitates pedestrian visibility by the straightness of Green Mountain Road at this point thus preventing blind spots.

**Issue:** It has become increasingly necessary to install a gate on the “Old Highway” at Kosmos to protect cultural resources. The arguments against installation generally favor the following as alternatives: spend additional money to promote education and increase enforcement to bring the “few” into compliance; that a gate simply chips away and erodes public access. Gating the property just serves Tacoma Power’s interests not the publics. There were discussions during the early years of management that guaranteed the public that they would always have access to the shoreline. Where does all the sedimentation in Riffe Lake end up and why does it not cover the cultural resources? If the sites are buried how can they be affected by vehicular traffic? Have other methods besides a few ecology blocks been used to try to control traffic?

**Response:** The issue regarding vehicular access to the east end of Riffe Lake first became identified when ORV use was causing habitat damage and the managers restricted access to promote growth of emergent vegetation. The results proved to be successful and waterfowl began to return to the “flats”. Public meetings were held as part of the development of the Wildlife Area Management Plan and a zone was defined where vehicular access would be allowed. The issue was further refined in 2001 with the institution of an access window between April 1 and October 31 to better manage the habitat and yet still provide public access to that area defined in the management plan. Cultural resources and a lawful mandate to protect them from destruction have now become the focal point that drives the discussion of a gate installation on the “Old Highway”. The purpose of the gate is to control vehicular access during low water periods when the defined area would be closed according to the 2001 Kosmos Access Plan. The gate facilitates the ability to control traffic onto culturally sensitive areas by providing the infrastructure to easily adapt to fluctuating water levels within a topographical “pinch” point that will prevent breaches around the gate.

Since most sediment is carried along the main channel and deposition occurs in areas of low energy, sediment buildup is occurring in Riffe Lake but not in the area that has been identified as culturally significant. You will see that most of the buildup occurs near the low water boat ramp and south of the area known as “Dogpatch”.

Signage has been used extensively to alert the public to areas where vehicular traffic is not allowed. However, the signage is often ineffective and people claim to have not seen the signs. Ecology blocks have proven to be the most effective way to define these areas but they do not provide an easy and flexible way to be adaptive as conditions change.

**Issue:** What does Tacoma Power do with all the wood on Riffe Lake?

**Response:** The Cowlitz Wildlife Area does not manage the wood on Riffe Lake. Tacoma Power has a plan that defines their practices regarding the use and management of the woody debris that river flows bring into Riffe and Mayfield Lakes.

**Issue:** Will there be ADA (motorized) access to the lands under the conservation easement on Olympic Resource Management (ORM) / Pope Lands?

**Response:** The lands will still be owned by ORM / Pope making them privately owned lands. The conservation easement will prevent development of these lands and provide for public access. ORM / Pope will retain the right to restrict motorized access to their lands.

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**Want to see the full plan?**

Go to –

[http://www.wdfw.wa.gov/lands/wildlife\\_areas/management\\_plans/](http://www.wdfw.wa.gov/lands/wildlife_areas/management_plans/)