
“GREEN SHEET”

Meeting dates: April 8–9, 2011

Agenda item 14: Capital Program Action Plan (CPAP) – Briefing

Staff Contact: Bill Phillips, Assistant Director, Capital Asset Management Program

Presenter(s): Bill Phillips

Background:

This briefing is in response to a Fish and Wildlife Commission request to the Department from the February 4-5, 2011 Commission meeting in Olympia. The request was to brief on the annual Capital Management Review as outlined in the “Berk” Report; including status of projects, project manager progress, development cost accounting, list of top 20 projects and discuss the projects that are not meeting objectives.

During implementation of the CPAP, we determined not all recommendations fit the specific needs of the Department and some were not implemented due to budget constraints. We also learned that some basic principles required more attention than originally thought. Significant improvements have been made and the opportunity is there to make even more.

Therefore, the briefing will include a discussion of:

- How direction has adjusted to what we have learned.
- The current priority direction.
- How we have and will continue to transition.
- What we see as our most significant progress.
- What needs to be done as far as future actions.

Policy issue(s) you are bringing to the Commission for consideration:

Continue to involve the Commission in the development and implementation of the Capital Ten-Year Plan and Capital Budget as outlined in Policy 6009 “Developing and Implementing the Capital Plan.”

Additionally, discussion during the briefing will address the need to develop and implement a process for Commission review of the Capital Program in a manner that supports the recommendations of the Berk Report and recognizes the changes to our Capital Program as a result of the declining budget.

Public involvement process used and what you learned:

N/A

Action requested:

The intent is to inform the Commission regarding progress towards the CPAP and receive input regarding future actions and direction.

Draft motion language:

N/A.

Justification for Commission action:

The Fish and Wildlife Commission requested the information.

Capital Asset Management Program



Project Status Report

April 08, 2011

Executive Summary

In 2007, the Legislature directed the Washington State Department of Fish and Wildlife (WDFW) to develop an action plan to improve its capital development, execution, and monitoring process. The Legislature provided this direction in the 2007-2009 Capital Budget with proviso language. They intended that WDFW address:

- (1) *The commitment and role of senior management to improve and change WDFW's capital budget practices;*
- (2) *The clarification of the Commission's role and responsibility for the capital budget process;*
- (3) *The development of capital program performance measures;*
- (4) *The alignment of the capital budget process with WDFW's strategic plan and priorities;*
- (5) *The implementation of a project scoping process;*
- (6) *The prioritization of capital projects, including both maintenance and other capital activities;*
- (7) *The review of business lines; and*
- (8) *The review of construction project delivery and organization.*

This update to the Capital Program Action Plan (CPAP) describes how WDFW is addressing the requirements of the proviso and other elements of an effective capital program. The principle actions in 2007 focused on development of the business lines and changing the capital development structure. In 2008, the focus changed to implementing technology, educating project managers, establishing reporting tools, balancing staffing with project needs, adjusting cost accounting systems, and continuing work on organizational improvements. The Department channeled its focus in 2009 and 2010 to reduce costs, right size staff, seek efficiencies, improve long range planning efforts, and improve the organization.

Accomplishments

Capital and Asset Management Program (CAMP) implemented a scheduling system using Microsoft Project software which has become part of the culture, and is working extremely successfully. Prediction of staff needs, workload balancing, and work window management is being provided using the schedule with assistance of new internal forecasting tools developed to support program management. The system also allows the program to provide high level briefings regarding program progress.

Implementation of the work order and asset management system (Web Work) allowing customers to enter work requests through a web-based application is operational and working well. Customers can now enter their needs/requests and personally track progress. Summary reports are used to plan, brief customer management, and fit workloads to customer needs.

The development of a facility condition assessment has been completed. The data has been loaded into a database system used to support operating budget requests. Updating is planned to occur during the last quarter of the 09-11 biennium. The condition assessment coupled with the asset management plan will help the Department focus on those areas of greatest priority.

Development of a database system to predict annual maintenance has been completed. The data represents a two year effort to identify all maintenance needs, specifically for hatcheries.

The utilization of layered financial tools, including project management budget plans, for each project has been completed. This action is successfully implemented and now part of the organizational culture. In the past, this was a key area of concern. By assigning responsibility directly to the project manager, projects are showing significant improvement in balancing scope to budget. Additionally, with individual budgets being better managed, reappropriations are expected to be lower with minor works expectations being met.

Project assignments are made in collaboration by a group of key managers. This action is successfully implemented and now part of the organizational culture. In the past, assignments were made on the basis of who had free time to work on the next project. With the work load predictor and use of program management collaboration, assignments are made on long range availability and skill set. The result is projects being completed on time, in budget, and meeting customer expectations.

Delivery method selection, which considers size, complexity, and resources available.

Hiring of a new employee serving as the CAMP's master scheduler.

Realignment of the organization.

Implementation of business lines.

Refinement of the Program's financial management and controls.

A coordinated capital budgeting process with linkage to the strategic plan. Significant improvements have been made since 2008. The 2011-2021 Capital Submittal will reflect a more enlightened view of the Department's long range vision and needs.

Formalizing the use of estimating tools for budget development.

Finalizing meaningful performance measures. The measures have shifted to focusing on outcomes including safety elements of facilities as well as customer satisfaction and facility function.

Defining long-range maintenance requirements (workload and funding needs).

Works in Progress

- Incorporating change as a part of WDFW's culture.
- Placing greater focus on the planning aspects of the capital program.
- Plans for deployment of staff to regional offices.
- Plans for cost cutting by using best buy practices to include self help practices.
- Continue resizing staff levels to match declining funding.
- Development of an Asset Priority Index (API) to help focus and direct limited resources to areas of greatest importance.

Spokane Laboratory Building

The Department held a dedication celebration on August 24, 2009 for the new Spokane office laboratory. Previously, the Department had rented an existing warehouse with a makeshift table to perform necropsies. The warehouse didn't have adequate sinks or plumbing and staff could not dispose of animal parts properly. CAMP managed the construction of the 5,300-square-foot laboratory and storage area. The new building allows employees to have a professional and sanitary place to work and perform dissections and necropsies.



Skookumchuck Hatchery Renovation



In August of 2009, CAMP started Phase II construction at the Skookumchuck Hatchery. The Department requested this project to ensure fish released in the upper Chehalis were from a locally adapted stock and to support fish production of Coho and steelhead in the upper Chehalis River Drainage. The Hatchery Scientific Review Group

recommended this project.

This expansion enabled the hatchery to handle adult fish more efficiently by adding three adult ponds, a spawning shed, a storage building, and fish ladder. CAMP completed the project in mid-October 2010. The project was completed on schedule and under budget.



Washougal Pond



CAMP renovated an existing earthen creek pond into a concrete pond measuring 40' wide by 500' long, providing 90,000 cubic feet of rearing space. The previous earthen pond produced 2.5 million Coho for planting into the Klickitat River as part of the US vs. Oregon Treaty obligation. The Department requested this project to improve the rearing conditions and increase the survival of fish these fish. Once the project was completed, the Fish Program also requested this project to allow

fish hauling of the entire pond stock and prevent incidental escapement of non-native stocks into the Washougal River system. This project was originally slated for construction in 2011, but the start date was pushed forward at the request of the program. Although weather was a factor in the construction of this project, Tapani Underground constructed the pond and the Lacey construction crew installed the screen and walkways with little impact to the hatchery's production program. The project was completed on time and under budget.



George Adams Pollution Abatement Pond



George Adams Hatchery needed to construct a pollution abatement pond is to treat effluent water produced by the hatchery, helping improve water quality in Hood Canal. The Lacey Construction Crew completed the pond and installed the cover in the fall of 2010.

Communication between CAMP and hatchery staff was imperative during construction due to live fish being on site. CAMP was able to coordinate with hatchery staff to ensure hatchery operations were not adversely affected by construction activities. This project was completed on time and within budget.

Leque Island North and South

The Lacey Construction Crew, coordinating with Department of Transportation, Department of Ecology, and Snohomish County installed water filled bladder tubes in order to protect Highway 532 while a WSDOT contractor replaced the bridge to Camano Island. The Crew installed over 1,000 feet of tubes in which each bag took about three hours to fill using 900,000 gallons of water. After the completion of the bridge the water filled bladder bags were drained and removed. Despite the fluctuating tides, the crew successfully completed the project by splitting shifts and working by artificial light at times until 12 AM.



In order to protect south Leque Island from flooding due to failure of the dike, the Lacey construction crew installed super sacks. The crew placed 4,890 yards fill to construct a 30 foot road base to install 1,050 super sacks using 1,365 yards of sand. The super sacks were wrapped with geotextiles fabric and the crew used 136 ecology blocks to form a wall to protect the super sacks. Despite the fluctuating tides, the crew successfully completed the project by working into the night.



Fish Passage Barrier Correction Projects

The Department requested funding in the 2007-2011 biennia to fix fish passage barriers and unscreened diversion on Department lands. Fish passage barriers violate state law by impeding fish passage. Correcting these barriers will allow the Department to comply with the law and aid in the recovery of ESA-listed salmon and steelhead stocks. These projects also help the Department correct fish passage barriers found within the U.S. v. Washington case area.

- *Crescent Lake Culvert*

As part of the Department's goal to remove fish passage barriers, the Lacey construction crew removed a three foot culvert and replaced it with an arch pipe at Crescent Lake in Snohomish County near Monroe. Installing the arch pipe proved to be challenging because the construction crew couldn't dewater the site because it was in the middle of a lake. Although the crew was required to work in six to eight feet of water, they successfully completed the project on time and under budget.





- *Cub Creek Culvert – Methow Wildlife Area*

CAMP's construction crew replaced an undersized six foot culvert with a 20-foot open-bottom arch culvert. Challenges included extremely steep access, bedrock at the culvert site and the required installation of a temporary bridge at a secondary location. Once the arch was placed, the crew removed the temporary crossing and abandoned all temporary roads. The project was completed on time and under budget. The site will be planted in fall 2011.



- *LT Murray Wildlife Culvert Removal:*



CAMP construction crews teamed up with the DNR Fireline Explosives crew to remove seven culverts ranging from 12" to 36" on a road abandoned in the 90's by using explosives. The culverts had to be removed in order for the roads to be accepted as abandoned and meet DNR's forest practice rules. The team used a

helicopter to deliver 800 lbs of gear and explosives the first day and packed in 500 lbs of explosives the second day. Packing the materials saved having to reconstruct over three miles of road and removing twenty year old trees. The project was complete in two days.



Mt. St. Helens Wildlife Area – Toutle River Flood Plain

The Department requested funding for this project in the 2009-2011 Capital Budget to stabilize the North Fork Toutle River in order to protect elk winter range and to improve in-stream conditions for fish.

Through the month of October and into early November 2010, the crew placed over 1,200 logs along the floodplain of the North Fork Toutle River in the Mount Saint Helens Wildlife Area. The construction crew used these logs to help stabilize the channel by driving the logs into the



mud flow as deflection walls to help prevent the rapid loss of elk habitat and to minimize sediment delivery due to bank erosion. Logs were also placed in habitat jam structures. The CAMP crews had to find creative ways to adjust to rapidly changing water flows, weather conditions, and bands of very hard and very soft ground. This project helped tie together similar projects done previously by the Department and the Cowlitz Tribe.

Soos Creek Hatchery - Generator and Electrical Upgrade

The old generator and electrical system had a number of electrical problems and code violations and was not reliable to provide backup power. A reliable generator is essential to provide water to critical fish stocks. CAMP corrected these problems, removed unnecessary on station primary voltage equipment, and installed a new electrical service. By installing this new equipment, CAMP improved reliability, eliminated safety and code violations and decreased future maintenance.



Oak Creek Fire Damage Elk Fence

The Cowiche Mountain Wildfire on July 18, 2010 damaged and/or destroyed over 2 ½ miles of elk fence. Capital funding was secured for the project start by the CAMP in mid-September 2010. The Yakima Construction Shop was tasked with the repair and replacement of the fence prior to the winter elk migration in November. The Shop began staging the materials and equipment on September 20, 2010. Ten temporary employees were utilized for the project in October and November with crew member.

The shop replaced, repaired, or patched all fence openings prior to the Modern Firearm Elk season opener. Regional enforcement staff were pleased to hear the fence had been closed as they observed a herd of more than 200 elk approaching the southeast corner of the fenced area.



Survey and Boundary Marking

In 2010, the Survey Section completed approximately 40 survey projects involving wildlife area boundary location, hatchery improvements, bridge replacements, public access areas, and new property acquisitions. The largest of these survey projects was the Wildlife Area Survey and Marking project which involved locating and posting the boundary of 22 miles of the Chiliwist Wildlife Area in Okanogan County.



Morse Creek Restoration



North Olympic Salmon Coalition hired CAMP to manage the Morse Creek Restoration project. This project was to restore the salmon habitat component of Morse Creek by restoring the creek to its historic channel and flood plain area. This area is owned by WDFW had previously been diked and had several old manmade ponds creating poor salmon habitat.

CAMP contracted with Jansen, Inc. who excavated 23,425 cubic yards of muck, topsoil and cobble to create 2,600 feet of new channel. Nineteen complex log jams were constructed of drilled pile, large rootwads chained in place, racking logs, limbs, river alluvium, topsoil, bark and plants. Additional project costs were primarily for the purchase of cobble for the log jam ballast. The Jamestown S’Klallam Tribe participated in fish exclusion during dewatering. The North Olympic Salmon Coalition provided SRFB grant funding. Final construction cost was \$996,216.04.



Crescent Barge Removal



The Yakima Construction Shop was contacted to remove a barge from the Wanapum Lake on Goose Island. The barge was pulled onto the river landing using two excavators where sections of insulation were removed. The barge was then “quartered” with cutting torches, loaded onto trailers and taken to the Yakima Construction Shop where staff completed the rest of the demolition and insulation disposal. The landing area was cleaned of refuse, lightly graded and a fabric barrier was installed to

retard run off until riparian work could be completed.

Recreational Access Sites

CAMP complete several access site projects this biennium. Recreational Conservation Office funded these projects from either the State Lands Development (SLD) or the Boating Facilities Program (BFP). The following projects are a few examples of projects CAMP completed this funding cycle. These projects generally improved or replaced existing infrastructure on Department owned or controlled lands.

- *Silver Lake, Spokane County*

Silver Lake was both a SLD project and a BFP. CAMP replaced the double ramp, installed a boarding float and fishing float and installed accessible parking and walkways.



- ***Lewis Street Access, Snohomish County***

This project was funded by a SLD Grant. Scope included replacing the upriver ramp, replacing the toilet, installing storm water features, and paving the turn-around area, entrance approach and ADA parking pad.



- ***Newman Lake, Spokane County***

This project was a SLD project. It consisted of a fishing float, gangway, kiosk, accessible parking and walkways



- ***Eloika Lake, Spokane County***

This project was a BFP grant. CAMP replaced the ramp and toilet and installed a boarding float, ADA parking and walkway.



- ***The Milepost 8 Access, Yakima County***

This project was a SLD project. CAMP installed a new toilet, parking pad, accessible trail, barrier rock and raft takeout ramp.

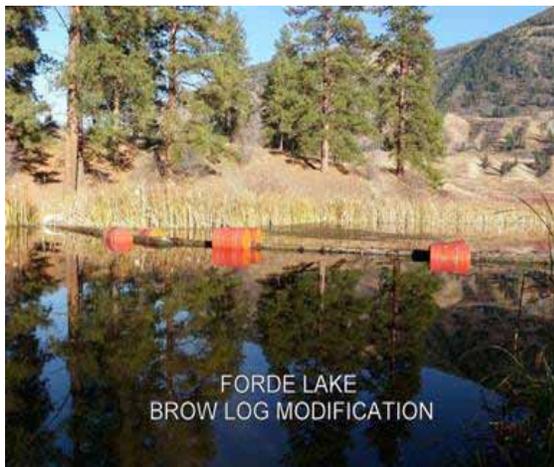


- *Audubon Lake Wildlife Area, Stevens County*

This project was funded by an SLD grant. It included two sites on each side of the lake. Each site included a view blind with view scopes, a vault toilet, gravel parking area and paved accessible parking and trail.



Forde Lake Dam Emergency Spillway and Brow Log Modifications November



Forde Lake is located in the Sinlahekin Wildlife area, Okanogan County, about 12 miles south of Loomis. On the north side of the lake is a small concrete dam/spillway structure with an earth formed emergency spillway. The Lacey Construction Crew installed two concrete cutoff walls in the emergency spillway to reduce the risk of the dam breaching during a flood event. In May 2006 an unexpected rainfall and a plugged main spillway caused erosion to this emergency spillway and damaged a cutoff wall. The wall and spillway

was repaired immediately. The assessment by Department of Ecology Dam Safety Office was to install a third cutoff wall between the two existing walls to improve the system's effectiveness. To prevent further plugging of the main spillway by debris, a brow log was placed in front of the spillway. In November 2010, the Construction Crew completed this third cutoff wall installation and made minor modifications to the brow logs.

LESSONS LEARNED

- ***Project Management***

- Creation of a tighter linkage with the customer programs.
- Communications with the customer.
 - Scope of the Work:
 - Not everybody visualizes what is on the plans. Education is needed in some cases.
 - The customer is the customer.
 - Utilization of a project charter is key to project success and is now mandatory on all projects
 - For large projects we are stressing weekly meeting during development of the project.
 - Small projects require less frequent meetings, but meetings are still required to ensure a meeting of the minds
 - Better coordination regarding available budget and spending
 - Formal monthly meetings with the programs on a management level.
 - Roles and Responsibilities
 - CAMP has developed a responsibility matrix for use
 - Habitat program has developed a project coordination flow chart which shows tremendous promise
 - Wildlife program is developing communication and coordination process which also promises to be a significant aid in the near future

- ***Budget Management***

- Requires development and management of project budget plans
- Utilization of a monthly reconciliation of the project budget to appropriations
- Constant communications with the agency Executive Management Team regarding transfers and progress.
- Better coordination with the construction crew is needed

- *Scheduling*
 - Currently utilizing master scheduling software
 - Monthly meetings with the project managers to ensure schedules accurately reflect work in progress
 - Better coordination with the construction crews is needed

 - *Out Sourcing*
 - Currently compiling the design analysis
 - A more regimented form of negotiations is required.
 - Follow the OFM guidelines for price setting
 - Ensure appropriate deliverables during key milestones
 - Think schedule
 - Learn and understand contracts
 - Ensure consistency in contract documents

 - Work the crew does
 - We are not competitive on all work
 - Roofs
 - Carpentry
 - Metal buildings
 - Grading

 - Response time is key in emergencies
 - Intakes
 - General system failures

 - Staying busy, planning the work and working the plan are the keys to success
 - Customer Service is key to our success
 - Communicate with site staff
 - Document the site when non agency property comes into play
-