

MEMORANDUM

Date: August 2, 2017

To: Chehalis Basin Board

From: Office of Chehalis Basin Staff

Re: Chehalis Basin Strategy: Options for Continuing Work without a 2017-2019 Capital Budget

Introduction

Funding for the Chehalis Basin Strategy is provided from the state capital budget. Since the legislature has not passed a capital budget for the 2017-2019 biennium, new funding has not been appropriated for this effort. The legislature did however pass a carryover budget, which includes \$20M in carryover (left over) funds from the 2015-2017 biennium for the Chehalis Basin Strategy. This memorandum summarizes, for Board consideration, options to continue work on elements for advancing the long-term Chehalis Basin Strategy work plan in the absence of a 2017-2019 capital budget by using some of the 2015-2017 carryover funds. If the Board agrees that work on advancing the long-term strategy should continue in the interim, this could be achieved by re-allocating carryover funds from 2015-2017 Chehalis Basin Strategy contracts, which were divided into two categories:

- Strategy - includes contracts related to agency, tribal, and consultant participation, environmental review, restorative flood protection analyses, water retention analyses, aquatic species and habitat research.
- Projects - includes contracts for construction of aquatic species habitat restoration projects and local flood damage reduction projects. There are two 'tiers' of projects funds; the first include unexpended 2015-2017 funds that are not likely to be spent this summer/fall due to delays in design, permitting, or construction. The second tier includes unexpended project funds that would be spent this summer/fall; reallocating unexpended funds from this tier of projects would delay the project.

Potential Sources from Carryover Funds

The table below lists different budget amounts from a portion of the 2015-2017 \$20M carryover funds that could be used to continue work on advancing the long-term strategy (other carryover funds are currently obligated to projects that have issued construction contracts). The budget amounts below are categorized into three different tiers: Tier 1 – funds are not currently allocated to any existing contract. Tier 2 – funds are currently allocated to a contract for a design/construction project, but funds are not anticipated to be used for several months. Moving tier 2 project funds temporarily would not delay the project, assuming funding is replaced if a 2017-2019 capital budget is approved before spring 2018. Tier

3 –funds currently allocated to a contract for a design/construction project, and moving funds would delay the project. Tier 3 funding is also assumed to be replaced once a capital budget is approved.

Source	Amount (estimated)	Tier
2015-2017 unobligated	\$116,715	1
Potential WDFW unspent 2015-2017 funds	\$545,000	1
Potential Ecology unspent 2015-2017 funds	\$332,000	1
Chehalis RM 78 funds	\$711,000	1
Habitat project cost increase contingency	\$175,000	2
Carlisle Lake (construction delay)	\$650,000	2
SCC - Farm Pads (construction delay)	\$87,000	2
Thurston County - Farm Pads (construction delay)	\$450,000	2
China Creek (construction delay) - open bids on 7/31 and then make selection (council meets as early as 8/8)	\$1,000,000	3
Aberdeen Fry Creek (design delay)	\$350,000	3
K1460 Lower Satsop River Design (construction delay)	\$150,000	3
Tier 1 = ~ \$1.70 Million		
Tier 1 + 2 = ~ \$3.07 Million		
Tier 1 + 2 + 3 = ~ \$4.57 Million		

Work Elements for Advancing the Long-term Strategy

Funds from the carryover budget from sources identified above could be used to fund agencies, tribes, and contractors' continued work on the major programmatic, i.e., "Strategy" elements of the 2017-2019 work plan, including:

- Development of the Aquatic Species Restoration Plan (ASRP).
- Project-level environmental review for the dams being considered on the mainstem Chehalis River to address questions raised during public review of the draft PEIS and determine the feasibility to mitigate the impacts of the dam.

- Detailed modeling and pre-permit design for restorative flood protection in one priority sub-basin to conduct project level environmental review and to potentially implement in the 2019-2021 biennium.
- Continued work with local governments to ensure that new floodplain development does not impact floodplain function or cause additional harm for residents and structures that are already located in the floodplain.
- Agency and tribal staffing necessary for overall project management, facilitation of technical and policy meetings and workshops, and technical review of critical documents.

Options for Continuing Work without New 2017-2019 Capital Budget

It is unknown when the legislature will adopt a capital budget for the 2017-2019 biennium. Options have been developed that assume budget adoption in September or November of 2017, or February of 2018. If a capital budget is not adopted by the target date identified in each option, much or all work on the Chehalis Basin Strategy would cease until 17-19 capital funds become available. Office of Chehalis Basin (OCB) staff worked with agencies, tribes, and contractors involved in the 2017-2019 work plan to estimate their anticipated monthly expenditures from July 2017 through February 2018. Given the estimates and the anticipated unexpended funds from 2015-2017 Chehalis Basin Strategy contracts, several options are presented below for continuing work on work elements in the absence of a capital budget:

Options	Key Assumptions and Objectives	Impact to the Long Term Strategy	Consequences to 15-17 Projects	Estimated 15-17 Funding Needed (\$M)
1. Wrap up: Complete work under existing agreements and contracts.	• No new capital budget is passed in the near-term • Allow projects and studies to continue as they were funded in 15-17 biennium	• Work stops on most elements in August • Technical resources to support the work are significantly reduced, and delay in start-up when capital budget is passed • Timeframes for critical Board decisions on ASRP, RFP and EIS for dam will be significantly delayed	• No change to Projects funded in 2015-2017 biennium (proceed to extent funds remain)	\$0
2. Continue most of work	• New capital budget passed before end of September	• Maintains option for 17-19 critical decisions by Board in 2018-19	• No change to Projects funded in	\$1.7 M

Options	Key Assumptions and Objectives	Impact to the Long Term Strategy	Consequences to 15-17 Projects	Estimated 15-17 Funding Needed (\$M)
program through September 2017 using Tier 1 funds.	- Designed to sustain the Chehalis Basin Board's 17-19 work program on a critical path for decision-making - Fishery research data collection would continue past September where delay this season would delay research for an entire year	If no capital budget passed by end of September, timeframes for critical Board decisions on ASRP, RFP and EIS for dam will be significantly delayed	2015-2017 biennium	
3. Continue most of work program through November 2017 using Tier 1, 2 and <u>some</u> of Tier 3 funds.	- New capital budget before end of November 2017 - Designed to sustain the Chehalis Basin Board's 17-19 work program on a critical path for decision-making	- Keeps 17-19 major actions on track for critical decisions by Board in 2018-19 - Phase I of ASRP is completed - If no capital budget passed by end of November, timeframes for critical Board decisions on ASRP, RFP and EIS for dam will be significantly delayed	Tier 3 projects will be delayed. If no capital budget is passed Tier 2 projects will be delayed	\$3.82 M
4. Scaled down work program through November 2017 using Tier 1 funds.	- New capital budget before end of November 2017 - Reduces capacity for strategy by 55%	- Timeframes for critical Board decisions on ASRP, RFP and EIS for dam will be delayed by 6-9 months - Phase 1 ASRP could be completed - Pilot ecological corridor delayed	No change to Projects funded in 2015-2017 biennium	\$1.7 M
5. Scaled down work	Capital budget before end of February 2018	Timeframes for critical Board decisions on ASRP, RFP and EIS for	Tier 3 projects will be	\$4.57 M

Options	Key Assumptions and Objectives	Impact to the Long Term Strategy	Consequences to 15-17 Projects	Estimated 15-17 Funding Needed (\$M)
program through February 2018 using all Tier 1, 2 and 3 funds.	- Reduces capacity for strategy by 40% - Maintains some capacity to advance the strategy	dam will be delayed by 6-9 months - Portions of proposed 17-19 work plan not critical to ASRP, RFP or EIS for dam will be significantly delayed - Ensures some level of progress on major actions (ASRP, RFP and EIS for dam) even if legislature delays budget action for several months	delayed. If no capital budget is passed Tier 2 projects will be delayed.	

Tier 3 Projects

Moving funds from tier 3 projects would delay the design and/or construction of those projects. Additional information is provided below for each of the projects to better understand the potential impact of a delay.

Centralia China Creek

The City of Centralia has designed a project to construct upstream storage on China Creek, modeled after the Johnson Creek Brookside Wetland project in Portland, OR. It is intended to use excavated naturally shaped landforms, stream channel friction and natural instream fish habitat features to slow down and store runoff from the upper China Creek watershed during high flow runoff events. Delaying the peak flow runoff from the upper basin (approximately 70% of the watershed, generating 40% of the runoff flow) will allow China Creek to transport runoff from the urbanized middle basin (approximately 15% of watershed, generating 50% of runoff flow), reducing the frequency and/or intensity of flooding downtown.

The flood benefits of the China Creek project include reduced/eliminated flooding of downtown businesses, preserving access along main travel corridors for emergency vehicles and the public, and improved emergency response time during flood events. The project will also recreate the China Creek ecosystem within the project boundary. The beneficiaries are local business owners, the public and the public employees who serve the public during flood events, fish and wildlife.

Aberdeen Fry Creek

Fry Creek passes through developed urban areas of Aberdeen and Hoquiam before discharging to Grays Harbor. The creek channel has been filled in and constricted over time as the cities have developed, and today it is generally a narrow channel passing through many culverts and under roadway crossings. During high rainfall events, the flow exceeds the capacity of the channel and the creek floods adjacent urban residential and commercial areas, affecting homes, businesses, roadways, and vital operations such as the Grays Harbor PUD and Pacific Care and Rehabilitation Center. In addition to direct flooding, city storm sewers that are hydraulically connected to the creek surcharge when it floods, contributing to significant flooding in low-lying areas not immediately adjacent to the creek such as Cherry Street farther east in the City of Aberdeen.

The Cities of Aberdeen and Hoquiam are currently developing a comprehensive flood risk master plan – the “Timberworks Master Plan”. The Master Plan will identify restoration and flood reduction measures for Fry Creek. Aberdeen will build on the work completed in the Master Plan to create a 30% design for restoration of Fry Creek to reduce flooding by improving conveyance, storage, and outfall conditions in the creek system. Additional goals include habitat restoration and improved public access to Fry Creek.

The project will benefit the City of Aberdeen, City of Hoquiam, Grays Harbor PUD, Pacific Care and Rehabilitation Center, and many others. The project will benefit the community through improved management of flood waters from Fry Creek thereby increasing property values, improving use of limited Public Works resources, improving habitat and recreational amenities.

Washington Department of Fish and Wildlife Satsop River Floodplain Restoration

Phase I of the project design is to identify alternatives for floodplain restoration. The Satsop River Floodplain Restoration project consists of ~100 acres of floodplain habitat impaired by ~5,200 lineal feet of constructed dike and ~2,500 lineal feet of riprapped riverbank. A committee has identified the dike, riprap, three gravel extraction ponds, and excessive eroding banks as additional potential areas to focus restoration efforts to restore floodplain functions, re-establish access to off-channel habitat, and allow the Satsop River to access ~2/3 of its lower reach migration zone. Phase I of the project will focus on evaluating possible benefits and impacts of removing all or a portion of the ~2,500-foot long rip-rap revetment on the east bank of the Satsop River approximately one mile downstream of State Highway 12.

The goal of Phase II of the Lower Satsop River Floodplain Restoration Project is to restore physical and natural fluvial processes to reduce soil and bank erosion, improve habitat complexity, and improve floodplain connectivity. Phase II will build on Phase I, which will develop background information and identify a range of conceptual project alternatives.

The benefits, impacts, and potential future evolution of the most promising alternatives from Phase I will be evaluated using the SRH-2D hydraulic model and by conducting in-depth hydrologic and geomorphic analyses. Together with project stakeholders, a preferred alternative will be selected based on the results of the modeling and analysis. A basis of design report, 60% design plans, and permit documents will be prepared for the selected alternative.

Next Steps

The Chehalis Basin Board will consider the options for continuing work at its August 3, 2017 meeting. The decision of the Board will determine what work will continue and for how long in the absence of a 2017-2019 capital budget. Following the Board decision, Board staff will contact agencies, tribes and contractors to implement the next steps.