

Peninsula Drainage District #1 and #2 Levee Accreditation Project

SPENDING AND REVENUE PROJECTION – Fiscal Years 2013-15

The levee accreditation project for Peninsula Drainage Districts 1 & 2 (Pen 1 and Pen 2) anticipates \$2.74 million in expenditures through June 30, 2015. The districts have raised \$1.36 million in revenue from lines of credit, a special assessment in Pen 1, and a small amount from annual operating assessments. The districts have no additional line of credit revenue opportunities and will require additional financing mechanisms to complete the required project work over the next 18 months.

The project costs over this time period are associated with the first two of four phases of the levee accreditation project. A full investigation of the current condition of the levee system is needed to understand the extent of modifications required to achieve accreditation. The 'Investigation' phase involves information gathering and engineering analysis, as well as project management and public outreach, and is expected to cost around \$2.7 million. This work is expected to be completed during 2014, with the bulk of project expenditures occurring February through August.

The final product of the investigation work will be an engineering report that details any deficiencies in the design or maintenance of the levee system that prevents it from meeting the requirements of accreditation. This will mark the beginning of the second phase of the work, which will involve development of engineering designs to remediate any deficiencies found during investigation. The exact costs for this work will depend on investigation findings, but is estimated to be around \$500,000. The work will begin during the 2014-15 fiscal years and likely conclude by its close.

The last two phases of the project involve implementing required capital improvements and submitting final documentation to FEMA to illustrate compliance with accreditation standards. The costs of these phases of work are unknown and will depend on discoveries and decisions made during investigation and design. Similarly, the timeline for the work will depend on the scale of remediation required and the source of funding.

The attached document includes a summary reconciliation of budgeted resources compared to actual or expected expenditures for the Investigation and Design stages of work.

**LEVEE ACCREDITATION
ESTIMATED COSTS AND REVENUE FY 2012-13 - 2014-15**

	PENINSULA DRAINAGE DISTRICT #1 (PEN 1)			PENINSULA DRAINAGE DISTRICT #2 (PEN 2)			TOTAL - ALL DISTRICTS		
	2012-13 ACTUAL	2013-14 ESTIMATED	2014-15 ESTIMATED	2012-13 ACTUAL	2013-14 ESTIMATED	2014-15 ESTIMATED	2012-13 ACTUAL	2013-14 ESTIMATED	2014-15 ESTIMATED
PROJECT COSTS									
<i>Annual Cost</i>	\$ 44,534	\$ 944,764	\$ 387,526	\$ 98,366	\$ 1,339,790	\$ 570,146	\$ 142,900	\$ 2,284,554	\$ 957,672
THREE-YEAR TOTAL	\$1,376,824			\$2,008,302			\$3,385,126		
PROJECT REVENUES									
<i>Annual Revenue</i>	\$ 44,534	\$ 720,497	\$ -	\$ 85,536	\$ 604,973	\$ -	\$ 130,070	\$ 1,325,470	\$ -
THREE-YEAR TOTAL	\$765,031			\$690,509			\$1,455,540		
SURPLUS/(SHORTFALL)									
<i>ANNUAL SURPLUS/(SHORTFALL)</i>	\$ -	\$ (224,267)	\$ (387,526)	\$ (12,830)	\$ (734,817)	\$ (570,146)	\$ (12,830)	\$ (959,084)	\$ (957,672)
THREE-YEAR TOTAL	(\$611,793)			(\$1,317,793)			(\$1,929,586)		

**PENINSULA DRAINAGE DISTRICTS 1 and 2
LEVEE ACCREDITATION PROJECT REVENUES
FY 2012-13 - 2014-15**

PROJECT REVENUES	PENINSULA DRAINAGE DISTRICT #1 (PEN 1)			PENINSULA DRAINAGE DISTRICT #2 (PEN 2)			TOTAL - ALL DISTRICTS		
	2012-13 ACTUAL	2013-14 BUDGET (ADJUSTED)	2014-15 ESTIMATED*	2012-13 ACTUAL	2013-14 BUDGET (ADJUSTED)	2014-15 ESTIMATED*	2012-13 ACTUAL	2013-14 BUDGET (ADJUSTED)	2014-15 ESTIMATED*
Line of Credit**	\$ 44,503	\$ 255,497	\$ -	\$ 26,027	\$ 473,973	\$ -	\$ 70,530	\$ 729,470	\$ -
Regular Assessment	\$ 31	\$ 15,000	\$ -	\$ 59,509	\$ 131,000	\$ -	\$ 59,540	\$ 146,000	\$ -
Special Assessment	\$ -	\$ 450,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000	\$ -
<i>Subtotal - Annual Revenue</i>	\$ 44,534	\$ 720,497	\$ -	\$ 85,536	\$ 604,973	\$ -	\$ 130,070	\$ 1,325,470	\$ -
THREE-YEAR TOTAL	\$765,031			\$690,509			\$1,455,540		

*No funds are yet identified for FY 2014-15.

**Budgeted line of credit revenues are \$276,000 (PEN 1) and \$490,000 (PEN 2). The budgets will need to be adjusted to reflect higher than anticipated draws in FY 2012-13

DESCRIPTION OF REVENUES

Line of Credit	PEN 1 has a line of credit through the Bank of the Cascades for \$300,000, PEN 2 for \$500,000. The 2013-14 BUDGET (ADJUSTED) column shows the total available from the line of credit less amount drawn in FY 2012-13.
Regular Assessment	Revenues from each district's operating assessment from district landowners.
Special Assessment	PEN 1 levied a special assessment of \$450,000 in FY 2013-14 to help pay the costs of the Accreditation project.

LEVEE ACCREDITATION
ESTIMATED PROJECT COSTS FY 2012-13 - 2014-15
PHASES 1 AND 2 - INVESTIGATION AND DESIGN

	PENINSULA DRAINAGE DISTRICT #1 (PEN 1)			PENINSULA DRAINAGE DISTRICT #2 (PEN 2)			TOTAL - ALL DISTRICTS		
	2013-14	2013-14	2014-15	2013-14	2013-14	2014-15	2013-14	2013-14	2014-15
DIRECT PROJECT COSTS									
Investigation & Documentation:	\$ -	\$ 728,296	\$ 31,875	\$ -	\$ 882,360	\$ 36,563	\$ -	\$ 1,610,656	\$ 68,438
<i>H&H Model for Lower Columbia Slough</i>	\$ -	\$ 6,630	\$ -		\$ 9,165	\$ -	\$ -	\$ 15,795	\$ -
<i>Topographic Survey</i>	\$ -	\$ 47,025	\$ -		\$ 52,369	\$ -	\$ -	\$ 99,394	\$ -
<i>Data Review and Scoping</i>	\$ -	\$ 25,000	\$ -		\$ 25,000	\$ -	\$ -	\$ 50,000	\$ -
<i>Site Exploration & Lab Testing</i>	\$ -	\$ 483,516	\$ -		\$ 611,888	\$ -	\$ -	\$ 1,095,404	\$ -
<i>Analysis</i>	\$ -	\$ 115,500	\$ -		\$ 128,625	\$ -	\$ -	\$ 244,125	\$ -
<i>O&M Update</i>	\$ -	\$ 18,750	\$ -		\$ 18,750	\$ -	\$ -	\$ 37,500	\$ -
<i>Certification report preparation & feedback during FEMA review</i>	\$ -	\$ 31,875	\$ 31,875		\$ 36,563	\$ 36,563	\$ -	\$ 68,438	\$ 68,438
Interior Drainage Model and Report	\$ -	\$ 18,000	\$ -		\$ 33,000	\$ -	\$ -	\$ 51,000	\$ -
Structural evaluation of encroachments		\$ 12,000	\$ 12,000		\$ 78,650	\$ 78,650	\$ -	\$ 90,650	\$ 90,650
Arboricultural evaluation of vegetation encroachments		\$ 5,313	\$ 5,313		\$ 9,375	\$ 9,375	\$ -	\$ 14,688	\$ 14,688
Communications and public outreach		\$ 5,625	\$ 6,000		\$ 6,250	\$ 7,000	\$ -	\$ 11,875	\$ 13,000
Project Management (internal)	\$ 23,643	\$ 28,800	\$ 14,400	\$ 59,509	\$ 93,600	\$ 46,800	\$ 83,152	\$ 122,400	\$ 61,200
OTHER (SOFT) COSTS	\$ 20,891	\$ 23,500	\$ 50,000	\$ 26,027	\$ 61,800	\$ 100,000	\$ 46,918	\$ 85,300	\$ 150,000
<i>Vegetation Management</i>	\$ -	\$ -	\$ -	\$ -	\$ 5,000	\$ -	\$ -	\$ 5,000	\$ -
<i>Legal Services</i>	\$ -	\$ 8,500	\$ 15,000	\$ -	\$ 15,500	\$ 45,000	\$ -	\$ 24,000	\$ 60,000
<i>Community Relations/Outreach</i>	\$ -	\$ 5,000	\$ 15,000	\$ -	\$ 30,000	\$ 30,000	\$ -	\$ 35,000	\$ 45,000
<i>Internal Overhead</i>	\$ -		\$ 10,000	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ 20,000
<i>Line of Credit Issuance Costs & Reserves</i>	\$ 20,891	\$ -	\$ -	\$ 26,027	\$ -	\$ -	\$ 46,918	\$ -	\$ -
<i>Line of Credit Interest</i>	\$ -	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ 15,000	\$ -	\$ 10,000	\$ 25,000
Estimated Total	\$ 44,534	\$ 821,534	\$ 119,588	\$ 85,536	\$ 1,165,035	\$ 278,388	\$ 130,070	\$ 1,986,569	\$ 397,976
with 15% contingency	\$ 44,534	\$ 944,764	\$ 137,526	\$ 98,366	\$ 1,339,790	\$ 320,146	\$ 142,900	\$ 2,284,554	\$ 457,672
ENGINEERING DESIGN	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 500,000
THREE-YEAR TOTAL		\$1,376,824			\$2,008,302			\$3,385,126	

DESCRIPTION OF WORK

Investigation & Documentation

H&H Model	Determine the current flood hazard characteristics of the area and model levee performance
Topographic Survey	Survey as-is conditions of levee features and structures within the levee right of way, in relation to properties and easements. Results used in geotechnical analysis and required as is for accreditation.
Data Review & Scoping	Identify existing data and documentation that could be used to satisfy FEMA requirements. Develop plan to collect information not already available.
Site Exploration / Lab Testing	Collect and analyze geotechnical data needed to assess levee condition
Analysis	Assess levee condition based on existing data and new data collected in site exploration (geotechnical evaluation)
O&M Update	Update O&M manuals per accreditation requirements.
Report Preparation	Prepare all documentation for report to FEMA
Interior Drainage Report	Using model developed for stormwater master plan, analyze system capacity during interior and exterior flooding.
Structural Eval - Encroachments	Identify foundation location and reinforcement for all structures within the levee right of way that have been identified as negatively effecting levee condition
Arboricultural Evaluation - Vegetation Encroachments	Identify root structure and location to determine if there is risk of levee impact.
Encroachment or levee design remediation	Depending on presence of deficiencies in levee and assessment of encroachments. Geotechnical Analysis will be primary driver for next steps.
Communications and Public Outreach	Keep public informed of progress and status of individual property evaluation. Engage community in problem solving (Oregon Solutions).

Estimated costs are based on a combination of direct vendor quotes and estimates based on recently completed, successful certification efforts in the Northwest.