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WaterSMART Grant Application

Installation of Conservation Pipelines – Moses Lake

January 16, 2013

East Columbia Basin Irrigation District

55 North 8th Ave.
Othello, WA 99344

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Executive Summary

January 14, 2013

The East Columbia Basin Irrigation District (District), headquartered in Othello, Washington, which is in Adams County, is proposing to replace approximately 18,039 feet of open canals with pipelines. By doing so, the District will conserve approximately 791 acre-feet of water each and every year. In addition, since water serving the Columbia Basin Project is pumped from Grand Coulee Dam, the Bonneville Power Administration (BPA) has calculated that an energy savings of approximately 558 busbar kilowatt-hours (kWh) per acre-foot will be saved, resulting in an annual energy savings of approximately 441,000 kWh's. Furthermore, any water that is not diverted from the Columbia River as a result of this conservation will be left in the river to assist the endangered salmon. And finally, a portion of this conserved water will be used to replace existing groundwater irrigated lands within the East District boundaries in an area commonly referred to as the "Odessa Subarea". The aquifer used to irrigate these lands is declining at a rapid and unsustainable rate; therefore, by providing them with a surface water replacement, the District will provide them with a reliable replacement water supply while generating additional revenue through new Water Service Contracts. It is estimated that this piping project will begin in October, 2013, and will be complete by April, 2015 and will be completed by District forces.

Background Data

Please see Appendix A for a general location map. The East Columbia Basin Irrigation District (District) is one of three (3) Irrigation Districts that operate the U.S. Bureau of Reclamation's Columbia Basin Project (CBP) in the state of Washington. Its source of power and water is the Grand Coulee Dam on the Columbia River. The District serves approximately 154,000 acres primarily for irrigation and has about 2,400 customers. Major crops include alfalfa, wheat, corn, potatoes, and beans. The average annual diversion from the Columbia River to serve the entire CBP is 2.65 million acre-feet, of which the East District uses approximately 895,000 acre-feet. We operate 87 miles of main canal (the East Low Canal), 30 miles of which is concrete lined and the rest is unlined, compacted earth. We operate approximately 530 miles of laterals and sublaterals, of which 25 miles are concrete lined, 38 miles are membrane lined and 80 miles are piped. We operate 62 pumping plants ranging in size from 10 Horsepower to 2,600 Horsepower.

The District began a formal water conservation program in 1986, utilizing the State of Washington's Referendum 38 water supply program which provided both grants and loans. The District began participating in Reclamation's Water Conservation Field Services Program (WCFSP) shortly after the program became available in 1996. These funds helped to update the District's Water Conservation Plan in 2007. The District has completed hundreds of water conservation projects since the inception of WCFSP. These projects included shotcrete lining, piping, automated gates for upstream level control, and polyurea crack sealing. The estimated water savings from these projects exceeds 20,000 acre feet per year.

Technical Project Description

If selected to receive a WaterSMART grant, the District plans to replace approximately 18,039 linear feet of earth lined, open ditch with PVC or HDPE pipelines ranging in size from 12" diameter to 27" diameter and carrying flows from 1 cubic feet per second (cfs) to 10 cfs. This proposal anticipates the need for approximately 18,700 lineal feet of pipe to replace the earthen laterals. Consequently, the District estimates a savings of approximately 791 acre-feet will be realized due to the elimination of seepage and evapotranspiration each and every year. Additional benefits received by piping open laterals include lower maintenance costs, decreased conveyance times, less sediment removal, less terrestrial and aquatic weed control, and many times, enabling on farm irrigation improvements such as center pivots to be installed which have been proven to greatly reduce the consumptive needs of agricultural croplands. These projects also address some of the District's aging infrastructure issues by replacing older open channel conveyance facilities with new efficient pipelines.

Since our canals and laterals are being used to deliver water from March 31st to October 25th, our construction season is fairly short. The District is comprised of two (2) watermaster sections, each with approximately 20 maintenance personnel. Each section is equipped with a digging excavator, long boom excavator, backhoe, Grade-all, dozers, several dump trucks, loaders, trench compactors, etc. Each watermaster section has historically been tasked with installing upwards of 12,000 linear feet of pipe in a construction season. For the two-year schedule proposed for the projects, District crews will install the entire 18,700 feet of pipe during the next two construction seasons.

Evaluation Criteria

Evaluation Criterion A: Water Conservation

Subcriterion No. A.1.—Water Conservation

Subcriterion No. A.1(a)—Quantifiable Water Savings

- The District is estimating that an annual savings of 791 acre-feet of water will be achieved through the piping of 18,039 feet of canals and laterals. Please see Appendix B for a comprehensive list of all of the piping projects and their associated seepage estimates. The calculations that the District used to determine this amount of water conservation originated in 2004 when the District hired the Montgomery Water Group to develop the *Phase I and Phase II Seepage Analyses, East Columbia Basin Irrigation District Water Conservation Projects* (Appendices C and D, respectively). These were done to determine the volume of water conserved from East District lining and piping projects that were previously completed with grants and loans from Washington State Department of Ecology's Referendum 38 program. The reports estimated seepage rates by geologic unit and analyzed the fate of seepage water. The following formula was used to determine the annual seepage loss:
  - Seepage Loss (acre-ft/yr) = Seepage Rate (ft/day) x Wetted Perimeter (ft) x Length (ft) x 195 (days)/43,560 (ft^3/ac-ft)

Average seepage rates for different geologic units were determined in the Phase I and Phase II reports and were accepted by Ecology and Reclamation for the use in estimating water conserved in past conservation projects. The following table presents those seepage rates by geologic unit.

Geology	Seepage Rate (ft/day)		
	Unlined	Lined	Piped
Outburst flood deposits, gravel (Qfg)	2.0	0.2	0
Outburst flood deposits, sand and silt (Qfs)	1.2	0.2	0
Continental sedimentary rocks (PLMc)	0.73	0.2	0
Wanapum basalt (Mv)	0.99	0.2	0
Loess (Ql)	2.24	0.2	0
Alluvium (Qa)	1.7	0.2	0
Dune sand, stabilized dunes (Qds)	2.24	0.2	0

- The East District diverts approximately 895,000 acre-feet of water annually from the Columbia River. While being transported in our canal and lateral system, a small, but appreciable, percentage of that water is seeping into the ground. As described in the Phase II report, that seeping water typically flows into shallow groundwater systems, some of which terminate in the Potholes Reservoir or the Potholes East Canal. The South Columbia Basin Irrigation District relies on these facilities for a portion of its water supply; therefore, water conservation projects in the East District that eliminate seepage may result in a reduction to the South District's supply. In portions of the East District (Block 49), the seepage water flows directly to the Columbia River and does not enter the Potholes Reservoir or the Potholes East Canal. The savings realized from conservation projects in this section is a direct benefit to the South District by providing capacity in their canal.

- It is the intent of the East District to offset its losses in seepage to the Potholes Canal with the conservation projects located in Block 49; consequently, the South District would not be harmed by our conservation. The net conserved water resulting from the WaterSMART grant funds will be used to replace existing groundwater irrigated lands located east of our East Low Canal in the Odessa Subarea.

- Annual transit loss reductions have been calculated for each section of canal piped and are shown in Appendix B. The average rate of transit loss for the proposed projects is 232 acre-feet per mile per year.

- Some of the laterals to be piped may have measurement devices sensitive enough to reflect the reduction in seepage achieved by the project. In those cases, a water balance calculation will be used to account for the diversions into and out of the lateral stretch. Diversion records are kept for every lateral for each day of the irrigation season. Pre- and post-project diversion records can be compared to determine the savings achieved by the project.

- Often, the measurement devices used to record diversions into and out of the lateral are not sensitive enough to reflect the changes in flows resulting from the reduction in seepage when a lateral is piped. In these cases, we conduct ponding tests on a representative sample of the laterals before the piping project is started. The District has frequently used ponding tests as a check against the approved methodology developed in the Phase I and Phase II Seepage Analyses.

- Where ponding tests are to be conducted, the District creates an earthen dam at each end of the section being tested and fills the canal section to its normal operating level. Staff gauges are installed at appropriate points to measure water level. Measurements are recorded every few hours until the canal is dry. The resulting data is used to calculate the seepage rate.

Subcriterion No. A.2.—Percentage of Total Supply

The three-year average of total diversions to the East Columbia Basin Irrigation District is 895,447 acre-feet per year. This number is based on the annual reports generated by the Bureau of Reclamation Ephrata Field Office. Based on an estimated water savings of 791 acre-feet per year for the proposed project, the percentage of total supply conserved is 0.088%

Subcriterion No. A.3.—Reasonableness of Costs

The following calculation describes the reasonableness of costs:

$$\frac{\$659{,}032.73}{791 \text{ acre-feet} \times 100 \text{ years}}$$

$$= \$8.33/\text{acre-foot-yr}$$

The design life used is based on an industry-accepted life of 100 years for buried PVC and HDPE pipe. This is a conservative estimate as the pipe can be considered to last indefinitely in the proposed installation environment.

Evaluation Criterion B: Energy-Water Nexus

Subcriterion No. B.2.—Increasing Energy Efficiency in Water Management

Columbia Basin Project water is pumped from Lake Roosevelt on the Columbia River into Banks Lake and flows by gravity from there to the three irrigation Districts on the project. There are 13 pumps, ranging in size from 56,000 hp to 65,000 hp. The Bonneville Power Administration has declared that each acre-foot of water pumped from Lake Roosevelt to Banks Lake requires 558 busbar kilowatt-hours. Water saved as a result of the proposed pipelines will no longer have to be pumped from Lake Roosevelt to supply the East District. Therefore, based on water savings of 791 acre-ft per year, the annual power savings will be approximately 441,000 kilowatt-hours.

In addition, some of the water saved by the proposed projects will be used to issue new water service contracts to farmers in the Odessa subarea. Currently, these farmers are using wells drilled deep into an aquifer that is declining. While these farmers are within the East District boundaries, project water has not been made available to them yet. Their farmland lies east of the East Low Canal (the District's main source of supply) and the infrastructure the District manages is not built to sufficient capacity to serve them. In anticipation of full project development, the state of Washington allowed the drilling of wells into the aquifer below them. The aquifer supplying the Odessa subarea is rapidly declining; much of the land currently supplied by the aquifer is estimated to be infeasible to irrigate by the year 2020. These farmers rely on very deep wells-in the range of 2000' to 5000' deep-to draw water from. Moving these farmers from wells to surface water from the Columbia Basin Project will accomplish significant energy savings through reduced pump horsepower needed.

Evaluation Criterion C: Benefits to Endangered Species

Chinook salmon are listed as endangered species in the Columbia River. Chum and steelhead are threatened. Although the Columbia Basin Project diverts less than 3 percent of the flow from the River, any water savings achieved within the Project is a benefit to the salmon. Since water conserved by this Grant will be used to supply CBP lands authorized by Congress for continued development of the CBP, all water supplied as a result of conservation will reduce the amount of future diversions under Reclamation's withdrawal permit from the Columbia River needed for project completion. This will result in more water remaining for endangered species in the Columbia River.

Evaluation Criterion D: Water Marketing

In the area known as the Odessa subarea, farmers currently use private wells to irrigate their land. The aquifer is declining rapidly and much of the land currently irrigated by these wells is projected to be infeasible to irrigate by 2020. The loss of this farmland would be a huge economic impact to the immediate area as well as the state of Washington. Much of the Odessa subarea is within East Columbia Basin Irrigation District boundaries. This land was envisioned to be served by second half development of the Columbia Basin Project. Second half development has not yet occurred. Water conserved by the proposed pipeline projects can be used to issue new water contracts to these farms currently using private wells. The full amount of the estimated savings (791 acre-feet) could be used as a source of supply for new water contracts. The District would issue these new contracts upon execution of a contract between the Bureau and the District. At a water duty of 3 acre-feet per acre, approximately 264 acres could be served by the water conserved under this proposal.

Upon issuance of a new water service contract, landowners would move their existing groundwater right to a status in which it would only be used in an emergency. Past water service contracts issued by the District run for a period of 10 years and can be

renewed indefinitely. This type of contract would provide a secure, long-term source of water, enhancing the viability of continued agricultural production.

Evaluation Criterion E: Other Contributions to Water Supply Sustainability

As discussed above, farmers in the Odessa subarea currently rely on an aquifer that is rapidly declining. Their water supply is not sustainable, even in the near term. They must pump from thousands of feet below ground to run their irrigation sprinkler systems. Moving these farmers to surface water from the Columbia Basin Project would significantly reduce pumping costs and result in reduced electric use. More importantly, they would obtain a long-term, reliable water supply.

The Odessa subarea contains over 100,000 acres currently irrigated by groundwater that are within the East District boundaries. The current preferred alternative to serve this area allows for about 70,000 of these acres to be served by Project water.

The Odessa subarea special study is a collaborative effort, primarily led by the Bureau of Reclamation and Washington State Department of Ecology. In April 2005, a Memorandum of Understanding (MOU) between the East District, Ecology, and Reclamation established goals on how to handle conserved water within the District. It was determined that the conserved water would be available as a replacement water supply for groundwater deliveries in the Odessa Subarea, municipal and industrial water supply, and environmental uses. Ecology funded the preparation of the Plan through the Columbia River Water Management Program.

Furthermore, in July 2006, the Washington State Legislature passed the Revised Code of Washington (RCW), Title 90, Chapter 90 (90.90) which declared that a Columbia River basin water supply development program was needed and directed the Department of Ecology to aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses.

Evaluation Criterion F: Implementation and Results

Subcriterion No. F.1.—Project Planning

The East District has a "Comprehensive Water Conservation Plan" which was developed in May, 2007 and is an update of one completed in 1995. Please see Appendix E for a photocopy of its cover.

This project meets the goals of the Comprehensive Water Conservation Plan as well as the "Columbia Basin Project, Coordinated Water Conservation Plan" developed for the three (3) CBP Irrigation Districts and the Washington State Department of Ecology.

Preliminary design work has been completed by District staff in support of the proposed projects.

The installation of conservation pipelines is a key priority identified in the District's Water Conservation Plan.

Subcriterion No. F.2.—Readiness to Proceed

To date, the District has performed all preliminary calculations to determine the size of pipe being used to replace the open canals. A final design cannot be completed until each canal is surveyed for verification of length and elevation drop.

The District plans to install roughly half of the proposed pipeline project beginning in October 2013 and finishing by March 2014. The remaining projects will be installed between October 2014 and March 2015.

To make this happen, the first half of the projects would be surveyed this spring/summer. Purchasing of materials would occur in September and October, with installation beginning in October. The timeline for the second half of the project would match the first half's.

It should also be noted that the District will be required to have all pipelines inspected by the State Historical Preservation Office (SHPO) to determine their historical significance or non-significance. This has the potential to cause a delay in the project commencing.

Subcriterion No. F.3.—Performance Measures

Some of the laterals to be piped may have measurement devices sensitive enough to reflect the reduction in seepage achieved by the project. In those cases, a water balance calculation will be used to account for the diversions into and out of the lateral stretch. Diversion records are kept for every lateral for each day of the irrigation season. Pre- and post-project diversion records can be compared to determine the savings achieved by the project.

Often, the measurement devices used to record diversions into and out of the lateral are not sensitive enough to reflect the changes in flows resulting from the reduction in seepage when a lateral is piped. In these cases, we conduct ponding tests on a representative sample of the laterals before the piping project is started. The District has frequently used ponding tests as a check against the approved methodology developed in the Phase I and Phase II Seepage Analyses.

Where ponding tests are to be conducted, the District creates an earthen dam at each end of the section being tested and fills the canal section to its normal operating level. Staff gauges are installed at appropriate points to measure water level. Measurements are recorded every few hours until the canal is dry. The resulting data is used to calculate the seepage rate.

Evaluation Criterion G: Additional Non-Federal Funding

Washington State Department of Ecology has consistently partnered with the District in support of conservation projects. The current budget proposed by Ecology contains a request for $6 million in water conservation funding for the upcoming biennium, consistent with the last biennium. This money is typically divided equally among the three Columbia Basin Project Districts. Appendix F contains a letter from Washington State Department of Ecology describing their commitment to the project. Ecology's contribution to the project is estimated to be $359,032.73 or 54% of the total cost.

Evaluation Criterion H: Connection to Reclamation Project Activities

The Columbia Basin Project was constructed by the Bureau of Reclamation beginning in the 1930s with the Grand Coulee Dam. First half development of the project was completed in the 1960s. Second half development has not been completed yet. The majority of land intended to be served by second half development is in the East Columbia Basin Irrigation District. Water conserved by the proposed pipeline projects can be used to serve some of this land.

The East District receives project water from Banks Lake, which is used as a reservoir to serve all three Columbia Basin Project Districts.

Environmental and Cultural Resources Compliance

The installation of conservation pipelines requires disturbing the existing open canal prism. The canal prism was previously constructed as part of the original system and has typically been cleaned occasionally by excavators or similar equipment. No impacts to air or water quality are anticipated. The work will be done when water is out of the canals and no discharge of stormwater from the project site will occur.

The pygmy rabbit, Columbia Basin DPS has been reported to live within the area. However, the District is not aware of any pygmy rabbits living near the proposed project sites. No effect is anticipated by construction of the proposed projects.

There are no wetlands within the proposed project sites.

The water delivery system was constructed primarily in the 1950s.

The project will eliminate existing open canals and some structures associated with those canals will be eliminated or modified. These are typically concrete structures such as drops, checks and turnouts. Most of these structures have not been modified since original construction with the exception of replacing gates.

The District's main canals, the East Low Canal and the Potholes East Canal, are eligible for listing on the National Register of Historic Places. The proposed projects do not include any modifications to the East Low Canal or Potholes East Canal.

There are no known archaeological sites within the project areas.

No adverse impact to low income or minority populations is anticipated.

No impacts to tribal lands are anticipated. There are no sacred Indian sites in the project area.

The projects will have no impact on the introduction, spread, or existence of noxious weeds or invasive species. District crews control weeds on an ongoing basis.

Required Permits or Approvals

The District will be required to obtain approval from the State Historic Preservation Office in order to complete the proposed projects. In the most recent projects where this was required, the District coordinated with the Bureau of Reclamation to contract the work to a consultant, who prepared a report describing their findings and submitted it to the State Historic Preservation Office for review and approval. The District intends to use this same process to obtain approval for the proposed projects.

Official Resolution

An official resolution in support of the proposed projects is included as Appendix H.

Funding Plan and Letters of Commitment

To fund these projects, the District plans on obtaining 46% of the total cost from Reclamation through the WaterSMART program. The Washington State Department of Ecology has requested money in the Washington State Budget to cover the remaining cost of the project. Refer to Appendix F for the letter from Washington State Department of Ecology describing their funding commitment.

Funding Sources	**Funding Amount**
Non-Federal Entities:	
1. WA Dept. of Ecology	$359,032.73
Requested Reclamation Funding:	$300,000.00
Total Project Funding:	**$659,032.73**

No project costs have been incurred. Design costs are anticipated to occur beginning in May of 2013.

Budget Narrative

Salaries and wages for engineering personnel are based on anticipated rates as of July 2013. Benefit rates are based on average rates for 2012 for engineering personnel.

Labor and equipment rates for construction are based on average prices for similar work done in the 2011-2012 construction season. The labor and equipment rates shown on the budget breakdown vary based on the size of pipe being installed. Equipment rates are based on the District's actual costs to run and maintain District equipment.

Pipe prices are based on 2012 quotes with 10% added to account for anticipated increases in pipe prices. Note: from 2011 to 2012 PVC pipe prices increased by approximately 15%. HDPE pipe prices increased by a much smaller percentage. 10% is a reasonable estimate of average pipe price increases in the next year.

Other materials incorporated into the work (such as concrete, pipe fittings, etc.) are tracked during construction. The lump sum prices shown on the budget breakdown are based on work done in the 2011-2012 construction season. Each reach of canal to be piped is anticipated to have a separate group of fittings and other materials.

The price shown on the budget for environmental and regulatory compliance is based on a contract with a consultant for the same type of work in 2011. Per phone conversation with that consultant, the amount shown is reasonable for the work anticipated.

Reporting costs are based on the District Engineer's combined wage and benefit rate and the number of hours anticipated to prepare the required semi-annual and final reports to Reclamation.

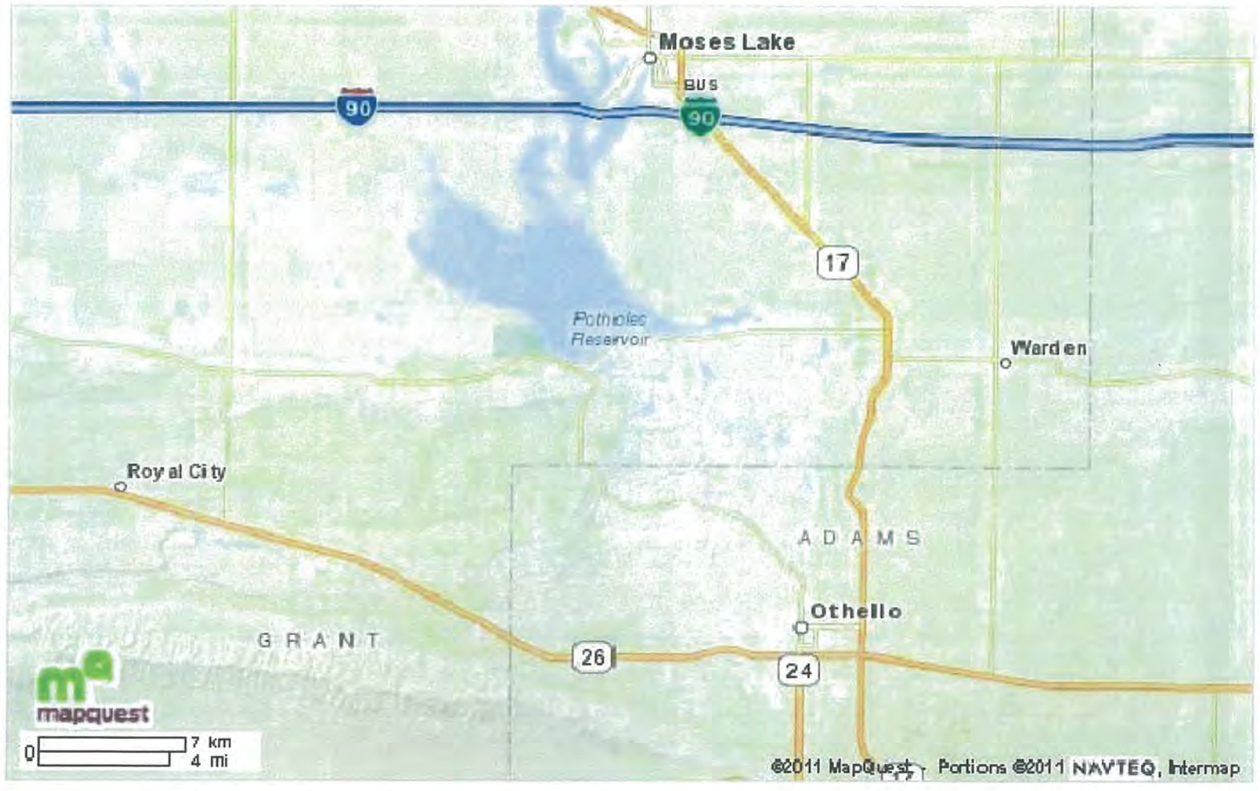
The District does not have an approved indirect costs rate agreement. The District does not intend to recover indirect costs under a WaterSMART grant agreement.

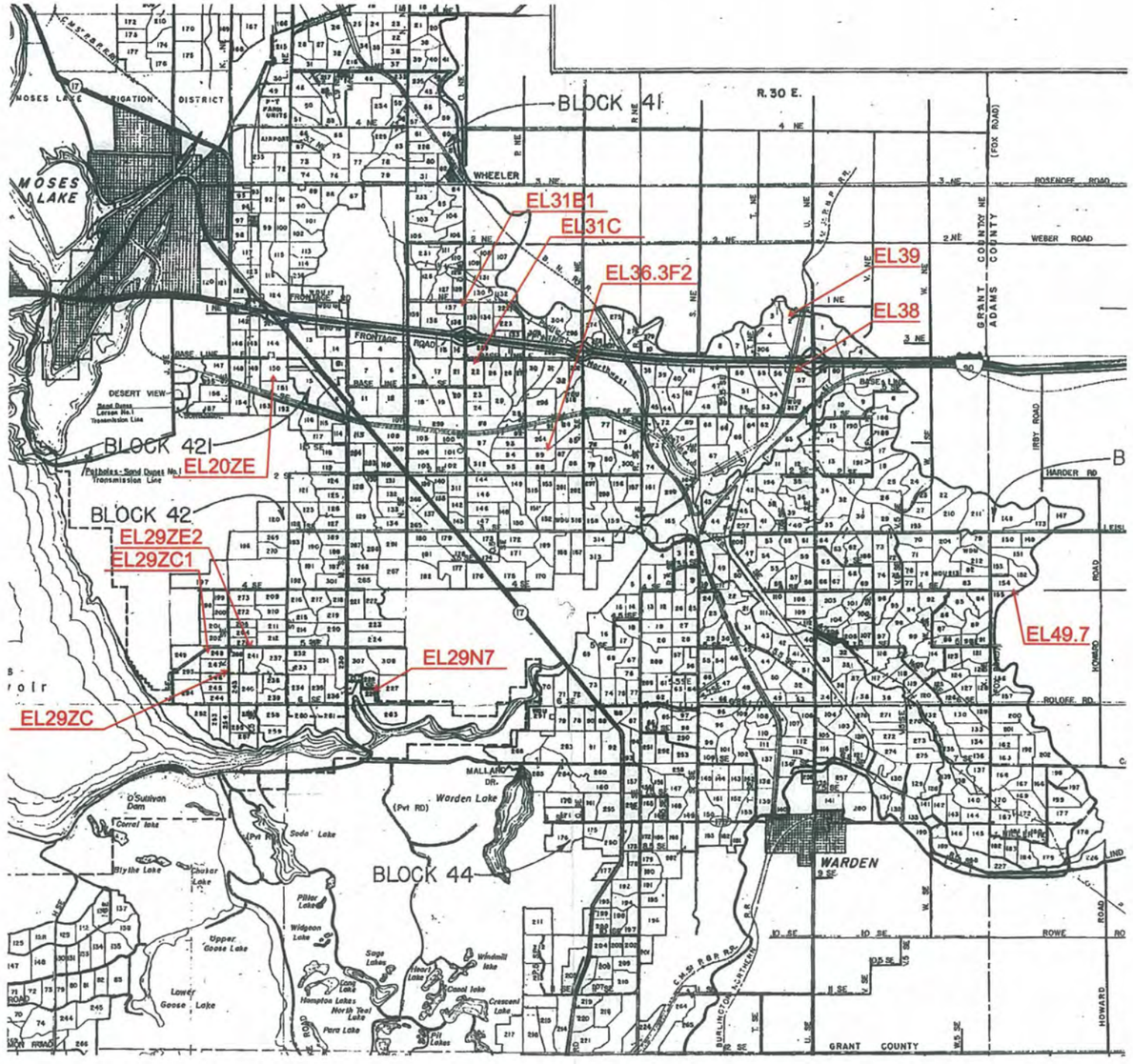
The proposed project budget and construction budget are shown in Appendix J.

Appendix A

Location Map

APPENDIX A
2013 WATERSMART GRANT APPLICATION
LOCATION MAP





Appendix B

Seepage Analysis

APPENDIX B - East Columbia Basin Irrigation District - Seepage Analysis

BLOCK	LATERAL	FLOW (CFS)	PIPE SIZE (IN)	STATION LENGTH (FT)	BASE (FT)	DEPTH (FT)	SIDE SLOPE	WETTED PERIMETER (FT)	GEOLOGY	SEEPAGE RATE FROM PHASE II STUDY (FT/DAY)	ESTIMATED SEEPAGE (AF/YR)	Losses in (AF/YR/ Mile)
41	EL20ZE	7	27	2032	2	1.5	1.75	8.0	Qfg	2	146.4	380.39
41	EL20ZE	2.5	15	1128	2	0.8	1.75	5.2	Qfg	2	52.8	247.00
41	EL20ZE	2.5	15	453	2	1.1	1.75	6.4	Qfg	2	26.1	304.16
41	EL31B1	4	15	728	2	0.6	1.75	4.4	Qfs	1.5	21.6	156.66
41	EL31B1	2	12	1274	2	0.5	1.75	4.0	Qfs	1.5	34.4	142.37
42	EL36.3F2	10	18	1196	3	1.1	1.75	7.4	Qfs	1.5	59.7	263.58
42	EL36.3F2	10	18	1544	3	0.9	1.75	6.6	Qfs	1.5	68.7	234.99
42	EL36.3F2	4	15	360	2	0.7	1.75	4.8	Qfs	1.5	11.7	170.95
42	EL36.3F2	2	12	1000	2	0.5	1.75	4.0	Qfs	1.5	27.0	142.37
42	EL29ZC1	3	15	397	2	0.4	1.75	3.6	Qfg	2	12.8	170.77
42	EL29ZC1	3	15	738	2	0.5	1.75	4.0	Qfg	2	26.5	189.83
42	EL29ZC	8.5	21	994	2	0.8	1.75	5.2	Qfg	2	46.5	247.00
42	EL29ZC	6	21	1000	2	0.7	1.75	4.8	Qfg	2	43.2	227.94
42	EL29N7	2	12	170	2	0.8	1.75	5.2	Qfs	1.5	6.0	185.25
42	EL31C	3	12	1100	2	0.4	1.75	3.6	Qfs	1.5	26.7	128.08
42	EL31C	3	12	390	2	0.5	1.75	4.0	Qfs	1.5	10.5	142.37
42	EL29ZE2	1	12	1582	2	0.7	1.75	4.8	Qfg	2	68.3	227.94
42	EL38	6	18	595	4	1.3	1.75	9.2	Qfs	1.5	36.9	327.62
42	EL39	5	21	924	3	1.4	1.75	8.6	Qfs	1.5	53.6	306.45
43	EL49.7	2.5	12	434	2	0.5	1.75	4.0	Qfs	1.5	11.7	142.37
TOTALS				18039							791.0	231.52

Appendix C

Cover Sheet of the Phase I Seepage Analyses

Phase I
Seepage Analyses
East Columbia Basin Irrigation District
Water Conservation Projects

Prepared for:

East Columbia Basin Irrigation District
P.O. Box E
55 North 8th
Othello, WA 99344

Submitted by:

Montgomery Water Group, Inc
803 Kirkland Avenue, Suite 100
P.O Box 2517
Kirkland, WA 98083-2517
Contact: R.A. Montgomery, P.E.
rmontgomery@mwater.com
(425) 827-3243

MONTGOMERY
WATER GROUP, INC.

August 2, 2004

Appendix D

Cover Sheet of the phase II Seepage Analyses

Phase II
Seepage Analyses
East Columbia Basin Irrigation District
Water Conservation Projects

Prepared for:

East Columbia Basin Irrigation District
P.O. Box E
55 North 8th
Othello, WA 99344

Submitted by:

Montgomery Water Group, Inc
803 Kirkland Avenue, Suite 100
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Kirkland, WA 98083-2517
Contact: R.A. Montgomery, P.E.
rmontgomery@mwater.com
(425) 827-3243

MONTGOMERY
WATER GROUP, INC.

October 6, 2004

Appendix E

Cover Sheet of the Comprehensive Water Conservation Plan

EAST COLUMBIA BASIN IRRIGATION DISTRICT

COMPREHENSIVE WATER CONSERVATION PLAN

Prepared for

East Columbia Basin Irrigation District

P.O. Box E

Othello, WA 99344

Prepared by

Anchor Environmental, L.L.C.

811 Kirkland Avenue, Suite 200

P.O. Box 2517

Kirkland, WA 98083-2517

ANCHOR ENVIRONMENTAL, L.L.C.

May 2007

Appendix F

Letter of Commitment

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

January 15, 2013

Craig Simpson
Secretary-Manager
East Columbia Basin Irrigation District
PO Box E
Othello WA 99344

RE: East Columbia Basin Irrigation District (District) WaterSMART Grant Application - Letter of Funding Intent

Dear Mr. Simpson:

As you are aware, in April of 2005, a Memorandum of Understanding (MOU) between the District, the Department of Ecology (Ecology), and the U.S. Bureau of Reclamation (Reclamation) was established that focused on the Columbia River basin water supply. It was decided then that water being conserved within the Columbia Basin Project (CBP) would be available as a replacement water supply for groundwater deliveries in the Odessa Subarea, environmental uses, and municipal and industrial water supply.

In 2009, the three CBP Irrigation Districts, along with Ecology, jointly agreed to prepare a Coordinated Water Conservation Plan that, through conservation, will allow additional acreage to be served without disrupting supply to existing acreage and that will also remain water budget neutral to Columbia River diversions. Since then, Ecology has funded three water conservation projects within the District and a fourth project year is underway currently. All your District projects have involved the piping and/or lining of numerous open laterals and have resulted in a savings of over 5,700 acre-feet of water annually to the Project which is now available for groundwater replacement in the Odessa Subarea. The State has awarded, or will award, approximately $3,083,200 for those efforts. At a cost per acre-foot of approximately $534, these projects are very economical and justifiable. It should also be noted that additional water savings are recognized when the Coordinated Conservation efforts of all three CBP Districts are considered.

It is our understanding that you are applying for two 2013 WaterSMART Grants with Reclamation. You have proposed to install additional conservation projects on open laterals in the grants, saving additional water annually, at a cost of an estimated $1.2 million.

In the fall of 2012, Ecology proposed to the legislature an additional $6 million of capital funds in the 2013 – 2015 biennium for continued funding for the Coordinated Conservation Plan for all three Columbia Basin Irrigation Districts. This capital request appeared in Former Governor Gregoire's proposed 13-15 budget. We anticipate this request to appear in Governor-Elect Inslee's proposed 13-15 budget in the coming weeks also. Ecology has funded conservation projects in the Columbia Basin for 4 consecutive years with an intent to fund projects for an additional 2 years, we see this as an important and cost effective investment for the state in water supply development in the Basin.

Ecology wishes you the best of luck on this application and hopes to help play an important role in the goal of conserving Columbia River water within the District to be used as a replacement water supply for groundwater being withdrawn from the Odessa Subarea.

Sincerely,

Derek I. Sandison
Director
Office of Columbia River

MD:DIS:RAZ (130119)