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## MEMORANDUM TO COUNCIL

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**TO:** MAYOR AND CITY COUNCIL MEMBERS  
**FROM:** PATRICK JORDAN, ASST. CITY MANAGER  
**THROUGH:** CHRIS HLADICK, CITY MANAGER  
**DATE:** FEBRUARY 9, 2015  
**RE:** **CCIAP AWARD: 10-CIAP-023, UNALASKA LAKE RESTORATION  
PHASE 1 STORMWATER MANAGEMENT PLAN; AND CCIAP AWARD  
10-CIAP-022, LOWER ILIULIUK RIVER RESTORATION**

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**SUMMARY:** The City of Unalaska was awarded two Coastal Zone Management Program grants in the amount of \$626,657.00 for the Unalaska Lake Restoration Project (the Lake Grant) and \$351,657 for the Lower Iliuliuk River Restoration (the River Grant). Council accepted both grants on January 28, 2014 by adoption of Resolution 2014-19.

Staff recommends that council decline the remaining funds for the River Grant because the project is deeply underfunded.

The Lake Grant is adequately funded and staff recommends proceeding with a portion of the recommended work. Guidance on Lake Grant scope of work is requested as well as consideration for extending the contract with PND from the general fund.

**PREVIOUS COUNCIL ACTION:**

Participation in a 1995-96 Evaluation of Mitigation Opportunities in Unalaska for the lake watershed and accepting two matching grants totaling \$75,000 for installation of sediment traps

RESOLUTION 2010-13 accepted state matching grant funding under Alaska Clean Water Action in the amount of \$45,000 for the Stormwater Collection-Sediment Separators

RESOLUTION 2010-49 accepted a matching grant in the amount of \$30,000 from the Alaska Clean Water Action

RESOLUTION 2014-19 accepting CIAP Grants 10-CIAP-023 and 10-CIAP-022 for a total of \$978,314.

RESOLUTION 2014-49 awarded the contract for Tasks 1 and II to PND Engineers, Inc. in the amount of \$197,000.

**BACKGROUND:** This grant process is being driven by the U.S. Fish and Wildlife Service and the now-defunct AWCRSA (Aleutians West Coastal Resource Service Area). We inherited the grant from AWCRSA so many of the grant requirements came from that organization and the City was not able to change the grant.

**DISCUSSION:** Council directed staff to review the SMPP (Stormwater Management and Prevention Plan) for the Lake and the RMP (Restoration Management Plan) for the River, and make recommendations on how to proceed with executing the Lake Grant.

## **LAKE GRANT**

The Lake Grant Task 5 requires that 3-4 sediment traps, separators, lift stations, low impact development measures and/or other measures as recommended in the SMPP be designed, permitted, and installed. There is \$522,107 remaining grant funds to accomplish these tasks.

PND proposed tasks that count as nine measures which are 5-6 more than needed to fulfill the grant. These nine measures are not a complete list of improvements needed to “fix” the watershed. The costs for the nine measures are detailed below, and include standard 20% contingency.

The project will also incur up to \$240,000 in engineering and contractor mobilization fees up front.

### **Recommended Lake Grant Measures**

1. **Overland Drive - Quarry Diversion Culvert:** Installation of a diversion culvert just before the quarry. The 95% SMPP recommended 3-4 diversions; however, the actual topography does not support this as most flows would route north through private drainage systems down through Choate Lane. This option has a disadvantage that the upper reach does not have significant flows and is normally not that turbid.  
**\$63,000**
2. **Overland Drive - Downhill Diversion:** Installation of approximately 600 feet of subsurface drainage pipe and catch basins on lower Overland Drive to reduce soil scouring in gravel ditch. This project would be very effective but it does entail higher risks and costs due to shallow utilities and potential excavation through bedrock.  
**\$289,500**
3. **Overland Drive - Inlet at Bottom:** Improve the inlet at the bottom of Overland Drive with dual catch basins and rip-rap. This project offers a more efficient means of capturing runoff and reducing scouring.  
**\$52,200**
4. **Overland Drive - Tennis Court Swale:** Installation of gabion basket check dams and revegetation of the channel as a means to polish the stormwater from the Overland Drive watershed separator.  
**\$21,600**

5. **Steward Road Bridge Detention Pond:** Installation of a sediment settling pond on City property near the Steward Road Bridge. Stormwater will be diverted from existing unseparated discharges on either side of the bridge to City property behind the lift station. A gravel catch will collect large particles for easy maintenance access followed by an infiltration area covered with natural vegetation and confined by an earthen berm lined with filter fabric. **\$189,000**
6. Resurface the DPW Parking Lot with Recycled Asphalt Pavement (RAP): The top 6-inches of the DPW D1 gravel parking lot would be replaced with 3,000 cubic yards of RAP which is significantly less erodible than D1 gravel. This project has the advantage that it can easily be broken into smaller portions to accommodate grant budget. **\$273,000**
7. Former Duck Pond Lot - Armstrong Court: Installation of a vegetated rock swale and improved inlet protection would restore a small part of the sediment reducing function of the former duck pond. **\$95,700**
8. Former Duck Pond Lot - King Street: Installation of asphalt cover and a concrete gutter in the parking areas on the south east side of King Street, and improved inlet protection will significantly reduce sediment entering the lake. This project is necessary to protect future asphalt. Since it may be funded by the 2015 paving projects it should not be included in the grant work due to conflicts and grant contractual requirements for designers and contractors. It will count as a grant task completed. **\$209,100**
9. **Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) Training:** Training roads maintenance workers in stormwater protection practices can reduce sedimentation entering Unalaska Lake through education. **\$21,600**

**SUBTOTAL                      \$1,214,700**

The grant requires design, permitting, and construction administration services. PND has completed pre-design work but the grant requires a 30 day request for proposal process be followed to hire a consultant to complete the work. Due to the short timeframe on this project, staff requests council consider funding design & permitting services from the general fund in order to avoid the required competitive RFP process dictated by the grant. Estimated costs of design and permitting:

Design and Permitting Requested from General Fund **\$95,000**

**TOTAL                                \$1,309,700**

Staff recommends we move forward to design and construction of measures numbered 3, 4, 5 & 9 for a total cost of \$284,400, plus \$240,000 for upfront engineering and mobilization, for a total \$524,400, funding the shortfall from the general fund in the amount of \$2,293; and further, that council fund design and permitting out of the general fund, estimated at \$95,000.

## RIVER GRANT

The River Grant requires the following elements:

|                                                                  |                  |
|------------------------------------------------------------------|------------------|
| 1. 1,500' of riverbank restoration (re-vegetation and coir logs) | \$100,800        |
| 2. 125' of light penetrating aluminum stairs & floating dock     | \$120,000        |
| 3. Fish weir                                                     | \$132,000        |
| 4. <u>OR</u> ADFG compatible fish sonar                          | <u>\$168,000</u> |

SUBTOTAL \$352,800-388,800

The project will also include approximately \$156,000 in engineering and contractor mobilization fees.

Remaining grant funds are \$247,107, so this project is significantly underfunded.

At the PN&D presentation on January 27, 2015 questions were asked about the lower river with regard to what had to be done to meet the grant requirements. On January 29th Patricia Soule, Tapiana Wray and I had a telephone conference with Rachel Spicer and Nathaniel Betz from the Department of Commerce, Community and Economic Development (DCCED). Rachel is the administrator for the Lake and River Grant or CIAP. She informed us that the River Grant is very specific with regard to its goals and deliverables that we must meet all of the specific items in the grant. A fish weir is specified in the grant and must be done, but the primary intent of the grant is to clean up the lower river. The grant requirements include 125 feet of light penetrating aluminum stairs/walkways, re-vegetation and coir logs along the lower 1500 feet of the riverbank, floating docks for skiff moorage, guard rails (unspecified in length) and the fish weir at the "church hole". She stated that these items must be completed or reimbursement would not be allowed.

The instructions are conflicting and as an example we have been told by Fish & Game that a fish weir cannot be located in the church hole, and that it must be located above the 5<sup>th</sup> Street bridge. This grant was written with the input of the U.S. Fish and Wildlife Service and the now defunct Aleutians West Coastal Resource Service Area. Their intent was to clean up the lower river and stop the degradation of habitat. This is a great goal, but it appears their plan did not have a larger public input.

Please see the attached excerpt from the grant. Given the fact that there is not enough money to do everything that the River Grant requires and the stringent stand that the granting agency has taken, we are recommending giving back remaining River Grant.

We will still, as a community, continue to clean the lower river. In fact, Public Works Director Tom Cohenour met with Vincent Tutiakoff and representatives of the Q-Tribe on February 5, 2015, about their efforts to clean up the lower river. It appears to be a well-organized coalition of volunteers with specific goals in mind. There is opportunity for City to partner with the Tribe in this effort. This is a very positive direction. As well, I have talked to Tom Cohenour about the

fact that this effort is simply the beginning of the comprehensive habitat restoration that needs to happen.

**ALTERNATIVES:**

The City could choose to fund all recommended project elements outside the grant;

The City could choose to return all remaining grant funds; or

The City can move forward with Staff Recommendations.

**FINANCIAL IMPLICATIONS:** No match is required for these grants but the scope will require additional City funds.

**LEGAL:** N/A

**STAFF RECOMMENDATION:** Staff recommends:

River Grant: Return the remaining River Grant.

Lake Grant: Staff recommends we move forward to design and construction of measures numbered 3, 4, 5 & 9 for a total cost of \$284,400, plus \$240,000 for upfront engineering and mobilization, for a total \$524,400, funding the shortfall from the general fund in the amount of \$2,293; and further, that council fund design and permitting out of the general fund, estimated at \$95,000.

**PROPOSED MOTION:** Proceed with Staff Recommendations.

**CITY MANAGER'S COMMENTS:** Proceed with Staff Recommendations.

**RESPONSES TO COUNCIL'S QUESTIONS:** The following questions were posed by council on January 27, 2015 following the presentation by PND:

- Can Department of Public Works perform any of this work in house?

*Lake Grant – There is budget to fulfil the required 3-4 sediment reducing measures without conducting any work in-house.*

*River Grant – DPW could perform some in-house work on the river grant; however, materials, labor, and supplies will not be reimbursable.*

- What are the historical costs of installing stormwater separators?

*Historically large pre-cast concrete separators for large run-off basins cost approximately \$150,000 per unit and smaller manhole sized separators for small run-off basins cost \$50,000 per unit. Costs include materials and installation but not consulting services or ancillary costs such as mobilization.*

- How many separators are there in Unalaska?

*In the Unalaska Lake Watershed there are approximately 17 eligible stormwater discharges of which 7 have a separator.*

*Separators are coarse filters that are not a substitute for source control measures such as vegetating or paving bare gravel. In fact many of our separators still discharge noticeably turbid water.*

- What existing City ordinances and zoning protect riparian areas?

*A buffer zone is defined by UCO 8.06.020 (25) "BUFFER ZONE" means an area or parcel of land which insures protection of the natural ground contour and cover bordering rivers, lakes, ponds, and streams from forces outside of nature. No clearing, cutting, excavation, cultivation, construction, or other disturbances of this zone are allowed. A buffer zone may meet all or portions of a set-back requirement.*

*UCO 8.08.090 Subdivision Design Standards (7) Buffer zones and greenbelts. Buffer zones and/or greenbelts may be required by the Platting Authority.*

*Historically buffers have consistently been set at 15' in new subdivisions. The extents are typically determined by surveyors rather than by a scientific delineation of wetlands as is typically required by an Army Corps of Engineers fill permit.*

*UCO 8.12.110 also has an Open-Space Zoning district which is protective of open natural spaces e.g. (A) Purpose and intent. The Open-Space District is intended to provide for the preservation and protection of the community's scenic resources, parks, recreation, and subsistence activities.*

- What BMPs could Department of Public Works employ to reduce gravel from entering the lake and river?

*Historically the Roads Maintenance Division has focused on maximizing public safety and convenience during snow removal. At this time there is not a formal operating procedure, or policy that requires BMPs for roads maintenance activities. Snow could be loaded into a truck and hauled elsewhere instead of being pushed into the Lake and River. This would be costlier in terms of man and equipment hours, it will delay the clearing of snow from some roads, and snow dump areas are limited so that this snow would need to be hauled to the landfill.*

*DPW is preparing a CMMP Nomination for a new Vactor Truck that Roads would use to clean-out built up sediment from storm water catch basins and separators. Built up sediment not only clogs the system but can also be re-suspended during larger storms and discharged to the river or lake. Currently Roads shares a Vactor Truck with Wastewater which incurs problems of disposal of raw sewage and availability of the equipment during the construction season.*

- Would there be enough RAP leftover from the paving projects to resurface the DPW parking lot?

*Yes. About 3,000 cubic yards is needed.*

- What would it cost for ADF&G to run a fish weir?

*ADF&G pays 2 individuals about \$25-\$30/hour to count fish near Winslow.*

*An interested entity could hire a consultant to run a fish weir and validate the data with assistance from non-profits to cover shifts and to help put up and take down the weir. The cost would range from \$50,000 to \$100,000 per year with a full time consultant qualified person presence during the sockeye run. Costs could be reduced with local hires by the consulting firm or if ADF&G allowed data validation with a reduced field presence of the qualified person.*

## Supplement #2 Project Narrative Attachment

AK CIAP NR AWCERSA T1-02

AK CIAP NR AWCERSA T1-02  
Submitted to FWS 4.30.14  
Changes are highlighted in yellow

### Statement of Work

Hold stakeholder meetings and collect and evaluate data resulting in a restoration strategy document. The document will identify future steps to taken to protect and restore the lower Iliuliuk river riparian area in Phase 2 of the project.

### Start Date and Duration

~~Fall 2011~~ Spring 2014 for approximately ~~nix~~ seven months.

### Milestones and Deliverables (Performance Measures)

| Date                                                 | Milestones                                                                                                                                                                                                                        | Deliverables                                            |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <del>9/26/11</del><br><del>11/17/11</del><br>6/15/14 | <del>Contractor</del> Consultant identifies and interviews major stakeholders.<br>First stakeholder meeting is held in Unalaska.                                                                                                  | Stakeholder meeting.                                    |
| <del>1-12-12</del><br>6/30/14                        | <del>Contractor</del> Consultant develops draft restoration planning document.<br>Update presented to <del>AWCERSA Board</del> City of Unalaska.                                                                                  | Draft Restoration Planning document.                    |
| <del>2-15-12</del><br>7/1/14                         | Second stakeholder meeting is held. A proposal for restoration steps to be accomplished in second phase of project is presented.                                                                                                  | Stakeholder meeting and proposal for restoration steps. |
| <del>3-15-12</del><br>9/30/14                        | Final presentation meeting is held <del>at AWCERSA Board meeting</del> .<br><del>Contractor</del> Consultant presents final restoration planning document and proposal for "next steps" to be accomplished in Phase 2 of project. | Final Restoration Planning Document and next steps.     |

### **Task III: Hire contractor to design, permit, and restore riverbank and riparian habitat and install fish weir**

#### Statement of Work

The City of Unalaska will competitively procure a ~~contractor to design, permit, and restore riverbank and riparian habitat and install a fish weir in the Iliuliuk River.~~ consultant to design and permit the installation of 1,500 feet of riverbank and riparian areas, such as a guardrail or alternative measures, approximately 125 feet of light penetrating aluminum stairs and/or ramps and small vessel floating docks, and a fish weir or ADFG compatible fish sonar in the Iliuliuk River. (Note: this is not a change in scope. The additional language is added for additional clarification and for consistency with other tasks)

#### Start Date and Duration