**APPENDIX A**
***ACWA Grant***
***SFY19-21***

*Scope of Services*

The scope of services is fully described in the attached workplan, budget, and budget narrative.

## SFY19-21 WORKPLAN

**PROJECT #:** ACWA-19-02
**GRANTEE:** Kenai Watershed Forum
**PROJECT TITLE:** Kenai River Water Quality Monitoring and Assessment
**AMENDMENT 1**: Adjust final report date from December 2020 to April 2021 due to pandemic related delays and staffing issues.
**GRANT AGREEMENT PERFORMANCE PERIOD:** March 1, 2019 – April 30, 2021

| SFY | Grant Amount | Match Amount | Total Project Cost |
|---|---|---|---|
| 2019 | $22,510 | $24,000 | $46,510 |
| 2020 | $43,678 | $30,000 | $73,678 |
| 2021 | $34,303 | $29,000 | $63,303 |
| Total | $100,491 | $83,000 | $183,491 |

Description and Purpose: This project addresses an ACWA Restoration priority. This project will perform ambient water quality monitoring for stormwater pollutants of concern, as well as develop a comprehensive GIS database that includes potential pollution sources to the Kenai River. The Kenai Watershed Forum (KWF) will expand their bi-annual water quality sampling to include at least three additional mainstem sampling sites and four additional tributary sites to obtain additional data on zinc and copper. Recent Kenai River data analysis by DEC found exceedances of zinc and copper water quality criteria. The current quality assurance project plan will be revised to include the additional sites. GIS data sources may include: stormwater maps, snow storage maps, NHD+ catchment information, impervious surface calculations, beach bacteria results, boat count results, fish habitat information, other potential sources of zinc (such as culverts and ELP walkways), and other layers of relevance to pollution sources. Existing map layers will be supplemented with on the ground project photographs taken during "river reconnaissance" trips. All of the project information will be submitted to DEC and used for watershed restoration planning activities.

### Grantee Responsibilities

1. **Reporting Requirements:**
   - Semiannual Reports: Each semiannual status report consists of a progress and financial report. The financial reports will be completed using the template provided by the Grants Administrator at grant inception. The required format of the progress report will be determined by the DEC Project Manager and communicated to the Grantee upon grant inception.

The progress and financial reports are due *ten (10)* days after the periods ending June 30, 2019, December 31, 2019, June 30, 2020, and December 31, 2020. The final progress and financial reports are due *thirty (30)* days after the grant completion date, and **no later** than Mayy 31, 2021.

- Executive Compensation: The Grantee must report the names and totals of the five most highly compensated executives if awarded a federal grant that equals or is greater than $25,000 to the Department within sixty (60) days of the award being obligated and if 1) the Grantee received 80 percent or more of its annual gross revenues from federal contracts or grants, or 2) the Grantee received $25,000,000 or more in annual gross revenues from federal contracts or grants. The Grantee is exempt from this reporting if the Grantee had a gross income from all sources under $300,000 from the previous tax year. The Grants Administrator will provide a template to the Grantee for completion at grant inception.

- Deliverables: (at least 1 electronic)
  At a minimum, 1 electronic of all deliverables will be submitted to the Department in formats requested by the DEC Project Manager. Each deliverable, format, and submission date will be listed under the appropriate task within the workplan.

- Permits: (1 electronic and 1 hard copy)
  The Grantee must ensure all necessary permits are identified in the workplan and obtained prior to implementation of any grant funded activity. In addition, copies of all the permits will be provided to the DEC Project Manager.

2. **Project Requirements** (If applicable):

- Monitoring Data Entry: In addition to a written project report, any water quality monitoring data collected by the project will be provided to the Department in accordance with the guidance and templates provided by the DEC Project Manager. The guidance and templates show the layout required for the Alaska Ambient Water Quality Management System (AWQMS)/Water Quality Exchange (WQX) compatible files and detail the valid values for metadata used in AWQMS/WQX (e.g. characteristics, analytic procedures, HUCs, etc). The data will be provided to the Department electronically via email, CD, or via a File Transfer Protocol (FTP) website. All data collected between the project start date and Dec. 31, 2019 will be furnished to the Department by March 31, 2020; and all data collected between January 1, 2020 and the project end date will be furnished to the department by February 28, 2021, unless otherwise specified by the DEC Project Manager.

  *(If project involves monitoring, tasks MUST include:*
  - Preparation/revision/approval of Quality Assurance Project Plan (QAPP) (if not previously prepared) in accordance with the Department guidance; monitoring cannot begin until the QAPP has been approved by the DEC Project Manager and Quality Assurance (QA) officer. The QAPP must be identified as a task product and deliverable.
  - Provide data to the Department in the specified format suitable for AWQMS/WQX;
  - Conduct an evaluation of monitoring results, present the results in tables, graphs and narrative discussion, and prepare a report summarizing that evaluation; if the report includes peer review or review by a technical advisory group, the Department should be included as a member.

- Project Photographs: At least 3 electronic photograph(s) of the project will be submitted in a format suitable for publishing. Additional project photos are appreciated. These photos will represent all the following: the problem the project addresses, the project in progress, and the environmental benefit of the project. At least one of these photos must be submitted with the first quarterly report; the remainder will be submitted with the final report or sooner if available. Each photo will be at least 800 x 600 pixels in size and in JPEG format or other format acceptable to the Department. Included will be background information on what the photo represents and when and where it was taken. If possible, the information will be in the photo's file name, such as “Fish_Ck_samplesite1_iron_floc_1016XXXX". Alternatively, it may be provided with a caption that states the date, location, and describes the subject: for example, "MCV-023X.JPG. Taken 10-16-XXXX, Ditch along south side of Alaska Highway that empties into Fish Creek: Note channelization."

- Web Map Applications and GIS Data: Web map applications and interactive map components of web applications must utilize a standard web map framework – the ArcGIS Online Web Map. Grantee must provide documentation for all web map applications and GIS produced data in accordance with EPA's National Geospatial Data Policy (NGDP) (see https://www.epa.gov/irmpoli8/epas-national-geospatial-data-policy-and-procedure).

- Final Project Report: ( 1 electronic copy)
  The final comprehensive report will be submitted to the Department in written and electronic format. The required format of the final project report will be determined by the DEC Project Manager, communicated to the Grantee at grant inception, and will be identified as a task within the workplan. The final comprehensive report is due **April 30, 2021**, **and is considered late after that date**.

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## DELIVERABLE SUMMARY TABLE

| Task | Deliverable Narrative | Due Date |
|---|---|---|
| **1** | Submit revised QAPP for approval by DEC | **April 1, 2019** |
| **1** | Final QAPP approved by DEC | **April 30, 2019** |
| | | |
| **2** | Field data sheets to include: a brief sampling event summary, a copy of the completed chain of custody form, and site photographs | **Within 48 hours of sampling event** |
| **2** | Final, analyzed sample results and report from DEC approved laboratory | **Within one month of sampling event** |
| | | |
| **3** | Draft report to DEC | **November 30, 2019**<br>**February 28, 2021** |
| **3** | Final report to DEC | **February 28, 2020**<br>**April 30, 2021** |
| **3** | Final, DEC approved presentation | **March 31, 2021** |
| **3** | Dates of delivered presentation to identified community partners | **TBD after final presentation approved by DEC** |
| | | |
| **4** | Completed DEC AWQMS data template, in Excel format | **February 28, 2020**<br>**February 28, 2021** |
| | | |
| **5** | List of potential data sources related to potential pollution sources to the KR mainstem | **June 30, 2019** |
| **5** | River-reconnaissance data documenting sources of KR mainstem pollution | **October 1, 2019** |
| **5** | Draft ArcGIS file Geodatabase and Microsoft Excel spreadsheet of data related to potential pollution sources to the KR mainstem | **April 30, 2021** |
| **5** | Final comprehensive report | **April 30, 2021** |

## PROJECT TASKS

**TASK 1:** Revise the existing Quality Assurance Project Plan (QAPP).

**Deliverable(s) and Permits:**

- Updated and revised QAPP to include the following sampling sites for expanded water quality monitoring for stormwater pollutants of concern, at a minimum including copper and zinc (*minimum* numbers of sampling events to occur each summer throughout 2019 and 2020 are listed in parenthesis):
    - Kenai River (KR) mainstem river mile (RM) 19 (2)
    - KR mainstem RM 50 (2)
    - KR mainstem RM 70 (2)
    - KR tributary Soldotna Creek (2)
    - KR tributary Slikok Creek (2)
    - KR tributary Beaver Creek (2)
    - KR tributary No Name Creek (2)

- No permits are needed for Task 1.

| Deliverable | Due Date: |
|---|---|
| Submit revised QAPP for approval by DEC | April 01, 2019 |
| Final QAPP approved by DEC | April 30, 2019 |

**TASK 2:** Perform water quality monitoring to supplement ongoing interagency water quality data collection for the Kenai River and selected tributaries.

**Deliverable(s) and Permits:**

- At a minimum, collect samples for copper and zinc, consistent with DEC's approved QAPP from Task 1, at the following sites (*minimum* numbers of sampling events to occur each summer throughout 2019 and 2020 are listed in parenthesis):
    - Kenai River (KR) mainstem river mile (RM) 19 (2)
    - KR mainstem RM 50 (2)
    - KR mainstem RM 70 (2)
    - KR tributary Soldotna Creek (2)
    - KR tributary Slikok Creek (2)
    - KR tributary Beaver Creek (2)
    - KR tributary No Name Creek (2)

| Deliverable | Due Date: |
|---|---|
| Field data sheets to include: a brief sampling event summary, a copy of the completed chain of custody form, and site photographs | Within 48 hours of sampling event |
| Final, analyzed sample results and report from DEC approved laboratory | Within one month of sampling event |

- No permits are needed for Task 2.

**TASK 3:** Evaluate sampling results and draft preliminary and final report of findings and conclusions.

**Deliverable(s) and Permits:**

- Sample results will be analyzed and evaluated in the form of a draft report after each sampling field season.
- A final report of findings and conclusions will be submitted to DEC at the conclusion of each sampling year.
- Present final findings to the Kenai River Special Management Advisory Board, representatives for the Cities of Kenai and Soldotna, and the Kenai Peninsula Borough.

- No permits are needed for Task 3.

| Deliverable | Due Date: |
|---|---|
| Draft report to DEC | November 30, 2019<br>February 28, 2021 |
| Final report to DEC | February 28, 2020,<br>April 30, 2021 |
| Final, DEC approved presentation | March 31, 2021 |
| Dates of delivered presentation to identified community partners | TBD after final presentation approved by DEC |

**TASK 4:** Complete the needed data template for DEC's water quality database (AWQMS).

**Deliverable(s) and Permits:**

- Completed DEC AWQMS data template.

- No permits are needed for Task 4.

| Deliverable | Due Date: |
|---|---|
| Completed DEC AWQMS data template, in Excel format. | February 28, 2020<br>February 28, 2021 |

**TASK 5:** Develop a comprehensive GIS database from available resources that includes potential pollution sources to the KR mainstem.

**Deliverable(s) and Permits:**

- Gather and produce geospatially explicit data related to potential pollution sources to the KR mainstem, to potentially include, and not limited to, the following data:
    - Stormwater maps, snow storage maps, NHD+ catchment information, impervious surfaces, potential sources of zinc to the Kenai River mainstem that are not part of the stormwater runoff (e.g. culverts, ELP walkways, and other galvanized metal surfaces), Kenai River beach bacteria results, results from boat count and fishing surveys, fish habitat information, and other layers of relevance to KR pollution issues.
    - Conduct 3 3-day river reconnaissance trips on Kenai River in 2019 to document potential point sources for pollution and gather other pertaining information.

| Deliverable | Due Date: |
|---|---|
| List of potential data sources related to potential pollution sources to the KR mainstem | June 30, 2019 |
| River-reconnaissance data documenting sources of KR mainstem pollution | October 01, 2019 |

| | |
|---|---|
| Draft ArcGIS File Geodatabase and Microsoft Excel spreadsheet of data related to potential pollution sources to the KR mainstem | April 30, 2021 |
| Final comprehensive report | April 30, 2021 |

## LINE ITEM BUDGET

### GRANT

| Cost Category | SFY19 *Grant Inception - June 30, 2019* | SFY20 *July 1, 2019 – June 30, 2020* | SFY21 *July 1, 2020 – Grant Closeout* | TOTAL |
|---|---|---|---|---|
| Salaries/Benefits | 12,017 | 26,700 | 24,429 | **63,146** |
| Travel | 2,244 | 3,198 | 604 | **6,046** |
| Equipment/Freight | 0 | 0 | 0 | **0** |
| Materials/Supplies | 2,250 | 2,035 | 1,050 | **5,335** |
| Contractual | 1,760 | 3,520 | 1,760 | **7,040** |
| Insurance | 0 | 0 | 0 | **0** |
| Other | 0 | 0 | 0 | **0** |
| Administration/Indirect | 4,239 | 8,225 | 6,460 | **18,924** |
| **Total:** | **22,510** | **43,678** | **34,303** | **100,491** |

### MATCH

| Cost Category | SFY19 *Grant Inception - June 30, 2019* | SFY20 *July 1, 2019 – June 30, 2020* | SFY21 *July 1, 2020 – Grant Closeout* | TOTAL |
|---|---|---|---|---|
| Salaries/Benefits | 6,000 | 6,000 | 6,000 | **18,000** |
| Travel | 0 | 0 | 0 | **0** |
| Equipment/Freight | 0 | 0 | 0 | **0** |
| Materials/Supplies | 0 | 0 | 3,000 | **3,000** |
| Contractual | 18,000 | 18,000 | 0 | **36,000** |
| Insurance | 0 | 0 | 0 | **0** |
| Other | 0 | 6,000 | 20,000 | **26,000** |
| Administration/Indirect | 0 | 0 | 0 | **0** |
| **Total:** | **24,000** | **30,000** | **29,000** | **83,000** |

## BUDGET NARRATIVE

**SFY19 (grant inception through June 30, 2019)**

**Grant Funds**

| | |
|---|---|
| **Salaries/Benefits:** | ED: 66 hrs @ $44.72= $2,951.52<br>Environmental Scientist: 244 hrs @ $27.77 = $6,775.88<br>Intern: 104 hrs @ $11.01 = $1,145.04<br>Intern: 104 hrs @ $11.01 = $1,145.04<br><br>Total Salaries/Benefits = $ 12,017 |
| **Travel:** | Truck: 12 days @ $75 = 900<br>Truck gas: 420 miles @ $.58/gal = 243.60<br>Boat: 4 days @ $250 = 1000<br>Boat gas: $100<br><br>Total Travel = $ 2,244 |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | Misc-sampling: $1,700<br>Shipping: $550<br><br>Total Materials/Supplies = $ 2,250 |
| **Contractual:** | Sample analysis: 11 @ $160 = 1,760<br><br>Total Contractual = $1,760 |
| **Insurance** | -0- |
| **Other:** | -0- |
| **Admin/Indirect:** | Indirect: 23.2% ($4,238.89)<br><br>Total Admin/Indirect = $4,239 |

**Non-Federal Match**

| | |
|---|---|
| **Salaries/Benefits:** | 243 hrs @ $24.69 (volunteer rate) = $5,999.67<br><br>Total Salary/Benefits = $ 6,000 |
| **Travel:** | -0- |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | -0- |
| **Contractual:** | City of Kenai @ $5,000, DNR @ $3,000, Kenai Peninsula Borough @ $5,000, Kenai Watershed Forum $5, 000 (Non-federal agency donations to support twice a year water quality monitoring program)<br><br>Total Contractual = $18,000 |
| **Insurance:** | -0- |
| **Other:** | -0- |
| **Admin/Indirect:** | -0- |

**SFY20 (July 1, 2019 – June 30, 2020)**

**Grant Funds**

| | |
|---|---|
| **Salaries/Benefits:** | ED: 34 hrs @ $44.72 = $1,520.48<br>Environmental Scientist: 486 hrs @ $27.77 = $13,496.22<br>Intern: 426 hrs @ $11.01 = $4,690.26<br>Intern: 426 hrs @ $11.01 = $4,690.26<br>GIS: 50 hrs @ $46.0616 = $2,303.08<br><br>Total Salaries/Benefits = $ 26,700 |
| **Travel:** | Truck: 10 days @ $75 = 750.00<br>Truck gas: 600 miles @ $.58/gal = $348.00<br>Boat: 2 days @ $250 = $500.00<br>Boat gas: $100<br>Raft: 6 days @ $250 = $1,500.00<br><br>Total Travel = $ 3,198 |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | Misc-sampling: $935<br>Shipping: $1,100<br><br>Total Materials/Supplies = $ 2,035 |
| **Contractual:** | Sample analysis: 22 @ $160 = $ 3,520.00<br><br>Total Contractual = $3,520 |
| **Insurance** | -0- |
| **Other:** | -0- |
| **Admin/Indirect:** | Indirect: 23.2%-predicted ($8,225.17)<br><br>Total Admin/Indirect = $8,225 |

**Non-Federal Match**

| | |
|---|---|
| **Salaries/Benefits:** | 243 hrs @ $24.69 (volunteer rate) = $5,999.67<br><br>Total Salaries/Benefits = $6,000 |
| **Travel:** | -0- |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | -0- |
| **Contractual:** | City of Kenai @ $5,000, DNR @ $3,000, Kenai Peninsula Borough @ $5,000, Kenai Watershed Forum $5, 000 (Non-federal agency donations to support twice a year water quality monitoring program)<br><br>Total Contractual = $18,000 |
| **Insurance:** | -0- |
| **Other:** | GIS software used @ $6,000<br><br>Total Other = $6,000 |
| **Admin/Indirect:** | -0- |

**SFY21 (July 1, 2020 through grant closeout)**

**Grant Funds**

| | |
|---|---|
| **Salaries/Benefits:** | ED: 94 hrs @ $46.0616 = $4,329.79<br>Environmental Scientist: 282 hrs @ $28.6031 = $8,066.07<br>Intern: 232 hrs @ $11.34 = $2,630.88<br>Intern: 232 hrs @ $11.3403 = $2,630.88<br>GIS: 147 hrs @ $46.0616 = $6,770.91<br><br>Total Salaries/Benefits= $ 24,429 |
| **Travel:** | Truck: 2 days @ $75 = 150.00<br>Truck gas: 180 miles @ $.58/gal = $104.40<br>Boat: 1 day @ $250 = $250<br>Boat gas: $100<br><br>Total Travel = $ 604 |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | Misc-sampling: $500<br>Shipping: $550<br><br>Total Materials/Supplies = $ 1,050 |
| **Contractual:** | Sample analysis: 11 @ $160 = $1,760.00<br><br>Total Contractual = $1,760 |
| **Insurance** | -0- |
| **Other:** | -0- |
| **Admin/Indirect:** | Indirect: 23.2%-predicted ($6,459.63)<br><br>Total Admin/Indirect = $6,460 |

**Non-Federal Match**

| | |
|---|---|
| **Salaries/Benefits:** | 243 hrs @ $24.69 (volunteer rate) = $ 5,999.67<br><br>Total Salaries/Benefits = $6,000 |
| **Travel:** | -0- |
| **Equipment/Freight:** | -0- |
| **Materials/Supplies:** | GPS camera, YSIs, other supplies as needed @ $3,000<br><br>Total materials/supplies= $3,000 |
| **Contractual:** | -0- |
| **Insurance:** | -0- |
| **Other:** | Low estimate of spatial datasets received from nonfederal partners and utilized for this project (e.g. wetland assessments, impervious surface data, etc...) @ $20,000<br><br>Total “other”= $20,000 |
| **Admin/Indirect:** | -0- |