Joint Funding Agreement Amendment

For ECOLOGY CONTRACT # C2000148 (amendment 1)

Regional status and trends monitoring of small streams for the Stormwater Action Monitoring (SAM) program

March 17, 2022

This amendment outlines additional work to be completed under the original joint funding agreement between the U.S. Geological Survey (USGS) and Department of Ecology (Ecology) to manage and oversee the regional status and trends monitoring of small streams for the Stormwater Action Monitoring (SAM) program.

The new study design for the SAM small streams status and trends program began in 2020. During the first 5 years under this new design, a new set of 33 small stream sites are monitored each year using a probabilistic random sample design. The original joint funding agreement between USGS and Ecology funded this work for the first 2.5 years. This amendment will add funds and extend the end date to April 30, 2025, in order to complete sampling and reporting of results for this initial 5-year time period.

Each water year, the major tasks for the small streams project include site evaluation and selection of a new set of 33 sample locations, deployment and maintenance of continuous water level sensors at each site, and a one-time summer sample for water and sediment quality, stream habitat (in-channel and riparian), and stream biota (algae and macroinvertebrates). All continuous data will be reviewed and approved using USGS protocols and published in ScienceBase, a permanent online data repository available to the public. All discrete data will be uploaded to Ecology’s EIM database. In addition, the USGS will be the lead on annually reporting of the findings for each water year to the Stormwater Work Group and regional stakeholders. A summary of the tasks to be funded with this amendment are provided by water year below.

**Water Year 2022: May 1st, 2022 to September 30, 2022**

- Conduct periodic data downloads and maintenance for all level loggers the rest of the year.
- Complete a one-time watershed health measure (WHM) and water and sediment chemistry sampling in summer (July through September) at 33 sites.
- Complete site selection and sensor installation for 2023 sample sites.

**Water Year 2023: October 1, 2022 to September 30, 2023**

- Conduct periodic data downloads and maintenance for all level loggers throughout the year.
• Complete site selection and sensor installation for the 2024 sample locations.
• Complete a one-time watershed health measure (WHM) and water and sediment chemistry sampling in summer (July through September) at the 33 sites.
• Process and quality control continuous records (water level and temperature) from 2022 sites, calculate temperature and flow metrics, and publish to ScienceBase.
• Provide an annual progress report to stakeholders to track the status of small streams in the region.

**Water Year 2024: October 1, 2023 to September 30, 2024**

• Conduct periodic data downloads and maintenance for all level loggers throughout the year.
• Complete site selection and sensor installation for the 2025 sample locations.
• Conduct a one-time watershed health measure (WHM) and water and sediment chemistry sampling in summer (July through September) at the 33 sites.
• Process and quality control continuous records (water level and temperature) from 2023 sites, calculate temperature and flow metrics, and publish to ScienceBase.
• Provide an annual progress report to stakeholders to track the status of small streams in the region.

**Water Year 2025: October 1, 2024 to April 30, 2025**

• Process and quality control continuous records (water level and temperature) from 2024 sites, calculate temperature and flow metrics, and publish to ScienceBase.
• Provide an annual progress report to stakeholders to track the status of small streams in the region.

It is expected that the SAM small streams program will continue past the initial 5-year period, but a new agreement will be needed at that time. As the initial 5-year period for the SAM small stream program ends, the current municipal stormwater permit expires and the new one will be issued. It is unknown what will be included in this new permit. Therefore, the current amendment will include work to wrap up data collection from 2024 sites, and set up sites for 2025, but not include work needed for new sites in water year 2025. This amendment also does not include funding to complete the larger final report on the first 5 years of data collection of the SAM small streams program.

**BUDGET SUMMARY**

The additional funding needed to complete the work in this amendment is provided below. This amendment will also extend the end date of the current agreement to April 30, 2025.
Indirect costs include all overhead charged to the project. Indirect costs include a percentage of salary for center management, IT, safety and administrative staff; facilities charges for building rent and maintenance; support for IT equipment and computer networks; USGS editorial and publication expenses; and services from the USGS headquarters office in D.C. The indirect fund rates are determined annually by the Department of Interior as a percentage of total project costs.

<table>
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<tr>
<th>Budget Item</th>
<th>FY 2022</th>
<th>FY 2023</th>
<th>FY 2024</th>
<th>FY 2025</th>
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<td>Salary</td>
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