



United States Department of the Interior
U.S. GEOLOGICAL SURVEY
Reston, Virginia 20192

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OFFICE OF SURFACE WATER TECHNICAL MEMORANDUM 2015.02

SUBJECT: Implementation of Surface Water Topical Project Reviews

Policy Summary: The U.S Geological Survey (USGS) Office of Surface Water (OSW) is implementing annual interpretive project reviews in the following four topical areas:

- 1) Statistical Hydrology;
- 2) Hydrologic Modeling;
- 3) Hydraulics/Hydraulic Modeling/Flood Inundation Mapping; and,
- 4) Sediment Monitoring and Investigations.

These reviews are intended to both serve as an aid in ensuring technical competency of the projects and further facilitate the growth of the various communities of practice in each topical area.

Criteria for selection of projects required to be reviewed will be based on project age and timing of the triennial surface-water reviews. Multi-disciplinary projects that have a surface-water component in one of the four topical areas are subject to review if they meet the criteria.

Centers are requested to provide OSW with a list of projects for **potential** review, including the name of the project, topical area(s) of the project, and project chief, by February 18, 2015. This information should be provided by filling out the Google Excel File SurfaceWaterProjects2015_SignUp.xlsx, which can be accessed at: https://drive.google.com/open?id=1FT9jf3pw2ETeF3oMgH2GKKcNj9TXb7zgglij_unk3eqU&authuser=0.

Each Water Science Center (Center) can create their project list from the National Proposal Repository and the Water Cooperative Program databases; but please include any projects, based on technical content, even if the project is not listed in those databases. Centers can also request a review for other projects that are not subject to the review requirement. OSW topical project review team leads will contact the project chief to evaluate the scope of and schedule a time for each review. OSW will distribute a summary list of projects that are planned to be reviewed to Center surface water specialists, the Water Science

Field Team, and the Offices of Groundwater (OGW) and Water Quality (OWQ) prior to the reviews.

Background: Ensuring national consistency and quality of interpretive surface-water studies is part of the mission of OSW. Highlighting and promoting new technologies, identifying and cultivating promising new investigative methods, and facilitating collaborative opportunities and funding partnerships are keys to improving USGS surface water science and sustaining and strengthening a USGS community of surface water scientists.

Traditionally, OSW has conducted project reviews only during each Center's triennial surface-water review. The frequency of the triennial review is often not sufficient to provide useful feedback to the Center's surface-water projects, or to meet the OSW objective of ensuring national consistency and quality of interpretive surface-water projects. In addition, appropriate subject matter experts are not always available during the on-site review. As such, over the past two years, OSW has implemented pilot testing of topical project reviews in both Statistical Hydrology and Hydrologic Modeling. OSW has received highly favorable feedback about these reviews from participating WSC scientists who value the increased contact with topical experts and expanded communications with other WSC scientists who share similar research interests. Based on what has been learned from our experience with these initial topical reviews, OSW is expanding the topical areas for review starting Fiscal Year 2015 to also include projects in the areas of Hydraulics/Flood Inundation Mapping and Sediment Monitoring and Investigations.

Determination of Projects To Review: Centers are required to submit surface-water projects to be reviewed if:

- 1) The project has not received an OSW topical review and has expended less than 50 percent of the total project cost (called an "initial" review); or,
- 2) The project is in a Center that will receive a triennial surface-water review in 2015. A project would be reviewed every year a triennial surface-water review is scheduled, as long as it is active; or
- 3) The project has been reviewed before by OSW and has been selected for follow-on review.

Furthermore, the surface-water aspects (statistical hydrology, hydrologic modeling, sediment investigations, and hydraulics/hydraulic modeling) of multi-disciplinary projects (for example, those that also have water quality, groundwater, or biology components) will also be reviewed if they meet the selection criteria. Projects not meeting the above criteria are not required to be reviewed, but Centers are encouraged to voluntarily submit projects for review. (Multi-disciplinary projects that are reviewed by the OSW topical review teams remain subject to review by the OGW and OQW.)

Review Logistics and Format: Each topical project review lead will contact the project chief to schedule a virtual (webinar/conference call) project review. This virtual review will typically last about 1 hour with the review team consisting of OSW staff, appropriate Water

Science Field Team specialists, and other subject-matter experts. The project chief will be requested to provide some preliminary project information to the review team in advance of the virtual review. During the review, the project chief will be expected to make a brief presentation to summarize the project, the duration of which will vary at the discretion of the topical review team lead. The remainder of the review will consist of questions and discussions among the project chief and review team. The topical project review lead will be responsible for providing the Center with a write-up of findings and any recommendations from the review.

After all projects have been reviewed in a particular topical area, the review team lead will coordinate a “community of practice” webinar whereby presentations will be made by selected projects chiefs to highlight selected technical practices and methodologies that are thought to be of interest to the broader community of practitioners. The presentations will be presented during a series of webinars that will be open to all interested Water Mission Area participants.

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