Maine Geological Survey Publication Type Guidelines

September 2021

The Maine Geological Survey (MGS) is the primary source for geologic information within the state of Maine and values sharing a wide variety of material with the public and scientific community. MGS strives to efficiently release accurate, high-quality maps and reports produced by staff and cooperating or volunteer geologists, but acknowledges that not all maps and reports can receive the same level of internal or external review. To accommodate the differences in purpose and style we provide several types of publications as outlined below. Unfortunately, MGS does not have the capacity to publish everything that might be submitted to us from outside the agency. So before submitting an unsolicited map or report, please contact MGS staff to ensure that the submission is appropriate and can be handled in a way that meets the expectations of both parties.

MGS has historically used several different series for publishing maps and reports. The publication type broadly indicates both the intended audience, category of material being published, and the level of scientific review applied to the material. The different publication types are based largely on the USGS types and definitions found in Table 1 of <u>Suggestions to Authors of the Reports of the United States</u> <u>Geological Survey, 7th edition</u>. MGS has made modifications and additions consistent with our mission as a state geological survey.

MGS recognizes the value of peer review but also must work within the time and financial realities of a small state survey. When possible, peer review should follow <u>Guidelines for Peer Review of a</u> <u>Geologic Map Product</u> and <u>Fundamental Science Practices: Peer Review from the USGS</u>. When this isn't possible, the review of a map or report by another geologist, even if they are also within the MGS is still valuable but doesn't allow the publication to be elevated from an Open File Map or Report or other less formal type to a Geologic Map or Bulletin. There are examples of Open File Maps or Reports adopted and used for regulatory purposes. These data should always be verified with site-level observations and measurements by surveyors, engineers and/or geologists. These maps are updated as new information becomes available.

Below are the publication types, definitions (based closely on the USGS definitions), and guidelines that MGS will use to release geologic information, listed in descending order of scientific review and approximate levels of effort. The assignment of publication type will be at the discretion of MGS staff, taking into account available resources and status of the submitted material.

- Geologic Maps
 - Definition: Detailed geologic maps (1:62,500-scale or larger) depicting areas of special importance to the solution of geologic problems. May portray bedrock or surficial units, or both. May include brief texts, structure sections, and columnar sections. Field observation data should be shown or described on the map.
 - MGS Guidance: The mapping should be complete, meaning that the map area should be fully investigated even if no information is provided for a portion. The geologist should be confident in their interpretations. At least one field review should be conducted with MGS geology staff. The publication should be peer reviewed by a geologist not directly associated with the project, and the author must address any review comments and be willing to work through multiple rounds of edits with MGS staff.

- Bulletin
 - Definition: Significant data and interpretations of lasting scientific interest. Results of resource studies, geologic or topographic studies, and collections of short papers on related topics.
 - MGS Guidance: Used historically for regional or statewide topical studies released in report format. Also used for major compilations of short works publications. Peer review should be completed, if possible.
- Open-File Maps or Reports
 - Definition: Preliminary manuscripts, maps, and other material made available for public use but not considered part of the formal literature. These products may cover a wide range of subject matter.
 - MGS Guidance: Mapping may be incomplete in some areas, or the geologist may consider the interpretation to be preliminary for some reason. Still useful as best available information. Edited by MGS staff, but not rigorously peer reviewed according to USGS standards. Some maps previously classified as MGS open-file maps would be geologic maps under the current (2021) guidelines.
- Miscellaneous Investigation Maps
 - **Definition**: High-quality maps or charts of varied subject matter such as bathymetry, geology, hydrogeology, landforms, and others.
 - MGS Guidance: Not previously used by MGS. This type can be used for high-quality, unsolicited submissions provided to MGS by working geologists or researchers. There may be little or no review by MGS geologists before publication but MGS has determined through internal deliberation that the work is complete and consistent with regional geologic principles.
- Circular
 - **Definition**: Technical or nontechnical information of popular interest including timely administrative or scientific information. Available to the public free of charge.
 - **MGS Guidance**: Used for publishing short topical reports on current events and for items such as Geologic Facts and Localities. Peer review not required.
- Miscellaneous Maine Field Studies (Map or Report)
 - **Definition**: Rapidly prepared, low-budget maps in a broad range of presentations in terms of portrayal, completeness, interpretations, draftsmanship, scale, and area coverage.
 - MGS Guidance: Not previously used by MGS. Can be used for small area, detailed maps, or reports on specific topics. This would include maps containing features other than those shown on existing MGS map series, or maps that show a compilation of single feature types (e.g. a dike map). May also be used for maps or reports submitted to MGS for publication by external geologists that cannot be thoroughly reviewed, geologically or editorially, by MGS staff.
- Progress Map or Report
 - **Definition**: Not defined by the USGS.
 - MGS Guidance: Intermediate datasets, maps, and/or summaries of geologic projects turned in to MGS, usually by contractors before the project is complete. All this material would ideally be incorporated in the final publication, but may have been left out for a particular reason or the project was never completed and published. This allows information that never made it into a publication to be released as it might be valuable to future researchers.