DIGITAL MAPPING TECHNIQUES 2023 LITE

The following was presented at DMT ‘23 Lite
(April 6, 2023 - A Virtual Event)

The contents of this document are provisional

See Presentations and Proceedings
from the DMT Meetings (1997-2023)

http://ngmdb.usgs.gov/info/dmt/
GIS, Editing & Publications

- Publishes and distributes science to the public
- ~30 GIS datasets
- Geologic Information Portal
- Outreach materials
- ~60 Webpages
# WGS PUBLICATIONS

<table>
<thead>
<tr>
<th>Publication Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUICK REPORT</strong></td>
<td>Quick, informal report on current event (mostly hazard-related)</td>
</tr>
<tr>
<td><strong>OPEN-FILE REPORT</strong></td>
<td>Informal report or map</td>
</tr>
<tr>
<td><strong>INFORMATION CIRCULAR</strong></td>
<td>Informal report/map with broad topic area</td>
</tr>
<tr>
<td><strong>DIGITAL DATA SERIES</strong></td>
<td>GIS &amp; other stand-alone datasets</td>
</tr>
<tr>
<td><strong>MAP SERIES</strong></td>
<td>Map-based publication, with possible external review</td>
</tr>
<tr>
<td><strong>REPORT OF INVESTIGATIONS</strong></td>
<td>Formal, topical report/map of project-based research findings</td>
</tr>
</tbody>
</table>
HOW WGS DISTRIBUTES PUBLICATIONS

WGS WEBPAGES
- Publication List (PDF)
- Publication Catalog (Page)
- GIS Data Download (Page)
- Library Catalog

GEOLOGIC INFORMATION PORTAL
- GIS Data Download (Portal)
- Web & Map Services

NGMDB
- All WGS Publications
WGS focuses efforts on ‘statewide’ databases

GIS data matches source information

WGS does not release GIS data with individual geologic map publications:

• Easier to publish mapping
• Easier for public to find the information
• Easier to ensure GIS matches the published mapping
• Easier to maintain fewer sets of metadata
• Easier to implement schema changes to datasets
500K & 250K MAPPING

Statewide, seamless

Statewide, some seams

- GeMS format
- Latest GIS release date: 2022
• Statewide coverage
• Mostly seamless
• WGS and GeMS format
• Updated as new 100K quads are published
25-99K MAPPING

- Not statewide (~13 maps now, 200 to go)
- Each map preserved as it was originally published
- Full of seams
- Some overlaps due to scale differences
- WGS Schema
24K MAPPING

• Incomplete coverage (376 quads out of 1,400)
• Nearly every quadrangle is a scratch boundary
• Data is preserved as it was published
• WGS schema
• 2023 GeMS delivery to USGS to meet USGS requirements
WGS PUBLISHING PROCESS

SCOPING

Determine project area, budget, tasks, personnel, outcome

Determine audience, level of review, format, publication type
WGS PUBLISHING PROCESS

Mapping, modeling, sampling, etc.
Analysis
Synthesis
GIS prep
Writing
WGS PUBLISHING PROCESS

SCOPING

SCIENCE

REVIEWING

Supervisor field visits

Program-level peer review

Iterative editing exchange of draft GIS, figures, and text

Cartography

*External peer review

Layout

Internal, Survey-wide, week-long review
WGS PUBLISHING PROCESS

Upload to web
Blog post
*Portal update
Publication List & Publication Catalog update
*Webpage editing
*Press release and media prep
NGMDB submission

SCOPING

SCIENCING

REVIEWING

PUBLISHING