

MODFLOW-OWHM Version 2.2  
and  
the USGS Source Code Website  
code.usgs.gov



California Water and Environmental Modeling Forum

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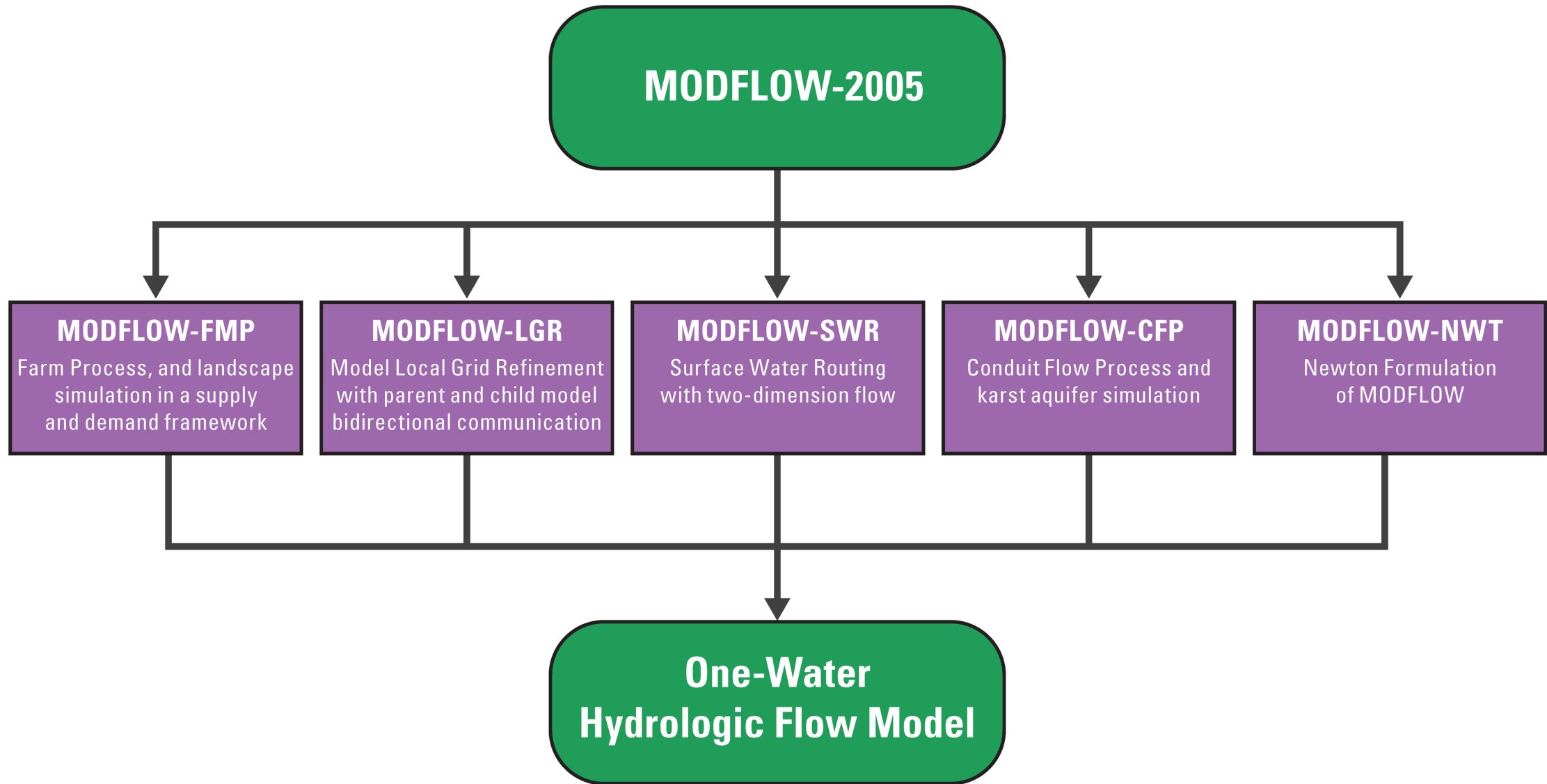
U.S. Geological Survey

California Water Science Center

<https://www.usgs.gov/staff-profiles/scott-boyce>

<https://www.cee.ed.tum.de/hydrologie/mitarbeiter-list/scott-boyce>

# MODFLOW Family of Simulators



# MODFLOW

## One-Water Hydrologic Flow Model



- MODFLOW-OWHM
  - OWHM is pronounced as ohm (unit of electrical resistance)
- Sometimes is called for short:
  - OneWater
  - OWHM

Boyce, S.E., Hanson, R.T., Ferguson, I., Schmid, W., Henson, W., Reimann, T., Mehl, S.M., and Earll, M.M., 2020, One-Water Hydrologic Flow Model: A MODFLOW based conjunctive-use simulation software: U.S. Geological Survey Techniques and Methods 6–A60, 435 p., <https://doi.org/10.3133/tm6A60>

# code.usgs.gov

- USGS now has an open-source repository runs on the GitLab Framework.
  - Note there are two popular git source repository websites:
    - Github
      - Facebook of code development
    - Gitlab
      - Practical code releases (more business oriented)

## Official Source Code Archive



In accordance with the [USGS public access plan](#), while source code developed by the USGS may also be found on third-party distribution repositories, the authoritative version of all such software is [maintained by the USGS in this publicly accessible archive](#).

<https://code.usgs.gov/modflow/mf-owhm>

Boyce, S.E., 2022, MODFLOW One-Water Hydrologic Flow Model (MF-OWHM) Conjunctive Use and Integrated Hydrologic Flow Modeling Software, version **2.2.0**: U.S. Geological Survey Software Release, <https://doi.org/10.5066/P9P8I8GS>

- Scroll past code to see the Readme for background info and download links

MODFLOW One-Water ...

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- Monitor
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USGS MODFLOW > MODFLOW One-Water Hydrologic Flow Model



# MODFLOW One-Water Hydrologic Flow Model

Project ID: 3320

Star 1

OWHM OneWater Conjunctive Use + 6 more

57 Commits 3 Branches 6 Tags 439.7 MB Files 439.7 MB Storage

MODFLOW OWHM Official Download and Source Repository

For download links and background info go to the [README](#)

or scroll down until you see the MF-OWHM banner

main

mf-owhm

History

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refactor: lpf and upw expanded comment support

Scott Boyce authored 3 weeks ago

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README

Apache License 2.0

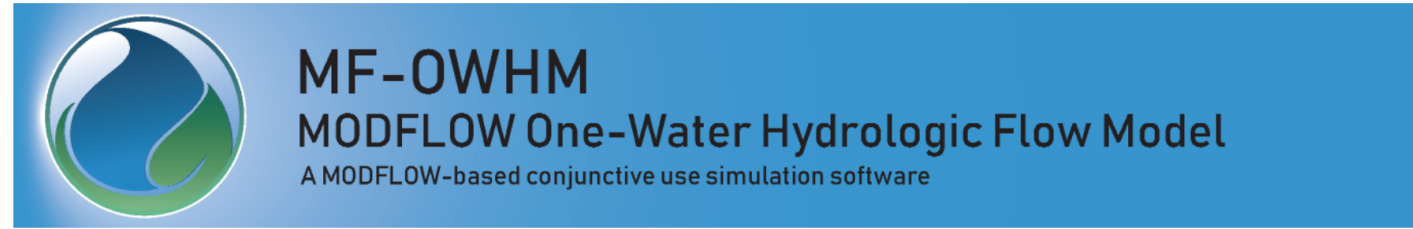
CHANGELOG

CONTRIBUTING

| Name    | Last commit                   | Last update |
|---------|-------------------------------|-------------|
| .util   | 2.2.0 production release code | 1 month ago |
| .vscode | initial commit                | 1 year ago  |

- If you scroll the webpage down, past the code, you will see the readme

- Contains background information
- Changelog of fixes and features
- Download links



IPDS No. `IP-136416`

## Version 2.2.0

MODFLOW One-Water Hydrologic Flow Model (MF-OWHM) Conjunctive Use and Integrated Hydrologic Flow Modeling Software.

Pronounced as Mod-Flow-Ohm (mäd flō ōm) or colloquially called OneWater.

### Version Release Notes

- [CHANGELOG.md](#) for bug fixes and issues that have been resolved.
- [CHANGELOG\\_Features.md](#) for new features added.
- [code.json](#) for version metadata as a text file in json format.

### Important Repository Branches

If new to git branching and tagging, please review the [Git Branches Section](#), which describes the major branches in this repository.

For help on how to download a specific version see the [Git Tags Section](#) which explains how the *Git Tags Page* works to download specific mf-owhm versions.

## Downloads

The following downloads the latest 64-bit executables for Windows ( `.exe` ) and Ubuntu Linux ( `.nix` ) and includes the source code, examples, postprocessors, and supplemental documentation ( `~40MB` download).

- [Current Release Version Download](#) ▶ *Recommended option*
- [Specific Version Downloads on Git Tags Page](#)

The following downloads the latest Windows x64 executable only:

USGS MODFLOW / MODFLOW

code.usgs.gov/modflow/mf-owhm

USGS Menu Search GitLab

MODFLOW One-Water Hydrologic Flow Model

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3320

OneWater Conjunctive Use + 6 more

Branches 6 Tags 439.7 MB Files 439.7 MB Storage

Official Download and Source Repository

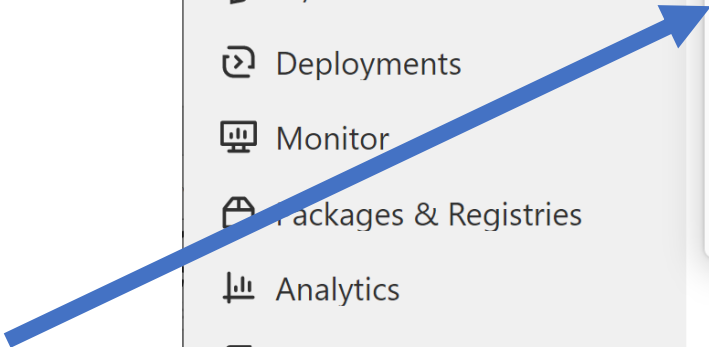
and background info go to the [README](#)

you see the MF-OWHM banner

main mf-owhm Hist

refactor: lpf and upw expanded comment support  
Scott Boyce authored 3 weeks ago

README Apache License 2.0 CHANGELOG CONTRIBUTING



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Tags give the ability to mark specific points in history as being important

Filter by tag name  Updated date

- 2.2.0 protected    
c04a35c7 · 2.2.0 production release · 1 month ago  
production release
- 2.1.0 protected    
ce2ed1cb · 2.1.0 production release · 10 months ago  
production release
- 2.0.3 protected    
e9ab7fb6 · 2.0.3 preliminary release · 10 months ago  
preliminary release
- 2.0.2 protected    
9097b6ba · 2.0.2 preliminary release · 11 months ago  
preliminary release
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d02119d1 · 2.0.1 production release · 1 year ago  
production release
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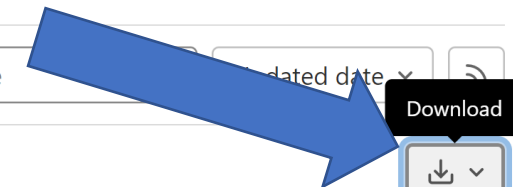
USGS MODFLOW > MODFLOW One-Water Hydrologic Flow Model > Tags

Tags give the ability to mark specific points in history as being important

Filter by tag name  updated date

| Tag                          | Commit   | Release Type              | Time          | Download |
|------------------------------|----------|---------------------------|---------------|----------|
| 2.2.0 <span>protected</span> | c04a35c7 | 2.2.0 production release  | 1 month ago   | Download |
| 2.1.0 <span>protected</span> | ce2ed1cb | 2.1.0 production release  | 10 months ago | Download |
| 2.0.3 <span>protected</span> | e9ab7fb6 | 2.0.3 preliminary release | 10 months ago | Download |
| 2.0.2 <span>protected</span> | 9097b6ba | 2.0.2 preliminary release | 11 months ago | Download |
| 2.0.1 <span>protected</span> | d02119d1 | 2.0.1 production release  | 1 year ago    | Download |
| 2.0.0 <span>protected</span> |          |                           |               | Download |

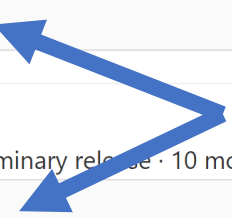
Download source code: zip (selected), tar.gz, tar.bz2, tar



Download source code

zip tar.gz tar.bz2 tar

Downloads v2.2.0 as mf-owhm-2.2.0.zip



# Production and Preliminary Releases

- Production

- Has USGS IPDS # (USGS documentation ID)
- Undergone full USGS code peer review
- Contains a Production Disclaimer

- Preliminary

- Has not been code peer reviewed
  - However, it is only a modification to a previously approved release
  - Option used to save on time when changes are only minor to code base
- Contains a Preliminary Disclaimer

# Thanks

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