

SCALGO

Scalgo Live

Interactive surface water planning



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SCALGO

Scalable Algorithms

Nationwide
mapping

The Earth is being
mapped in detail

Decades of
research

Analyzing massive
geographic data

Scalgo Live
platform

Nationwide analyses and
interactive tools

Continuous
development

Re-imagining surface
water planning

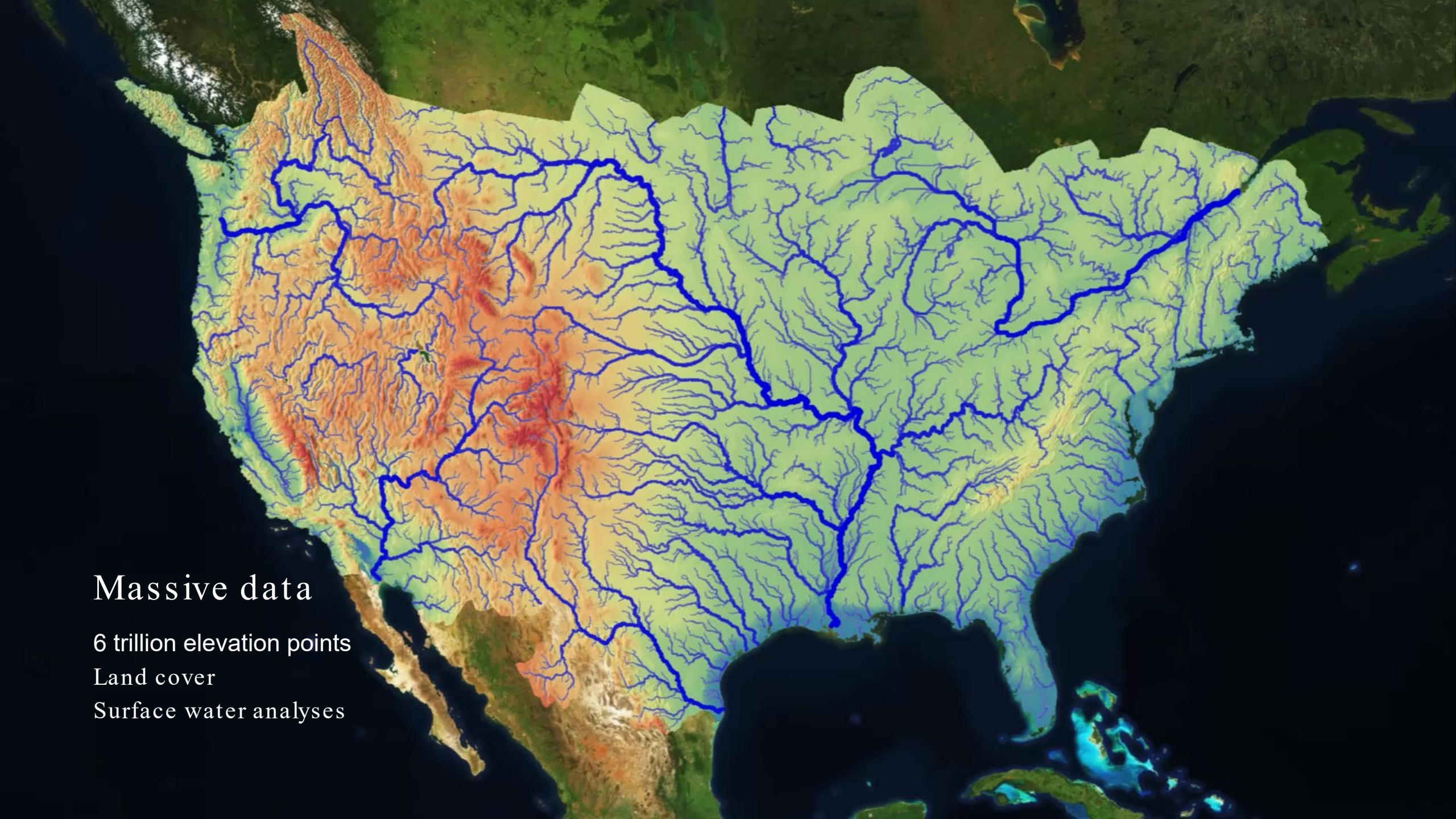


Scalgo Live

Interactive surface water planning

- Better surface water insights, from early planning through detailed design
- Broad applications: flood resiliency, stormwater management, LID, wetlands, land development, and more!
- Seamless collaboration across teams and stakeholders to build consensus and create better solutions





Massive data

6 trillion elevation points

Land cover

Surface water analyses



Spaces & Layers

Canvas

> Analysis

▼ Elevation

- Contours
- Terrain
- Terrain/Buildings

> FEMA (wms)

> Land Cover

> NRCS (wms)

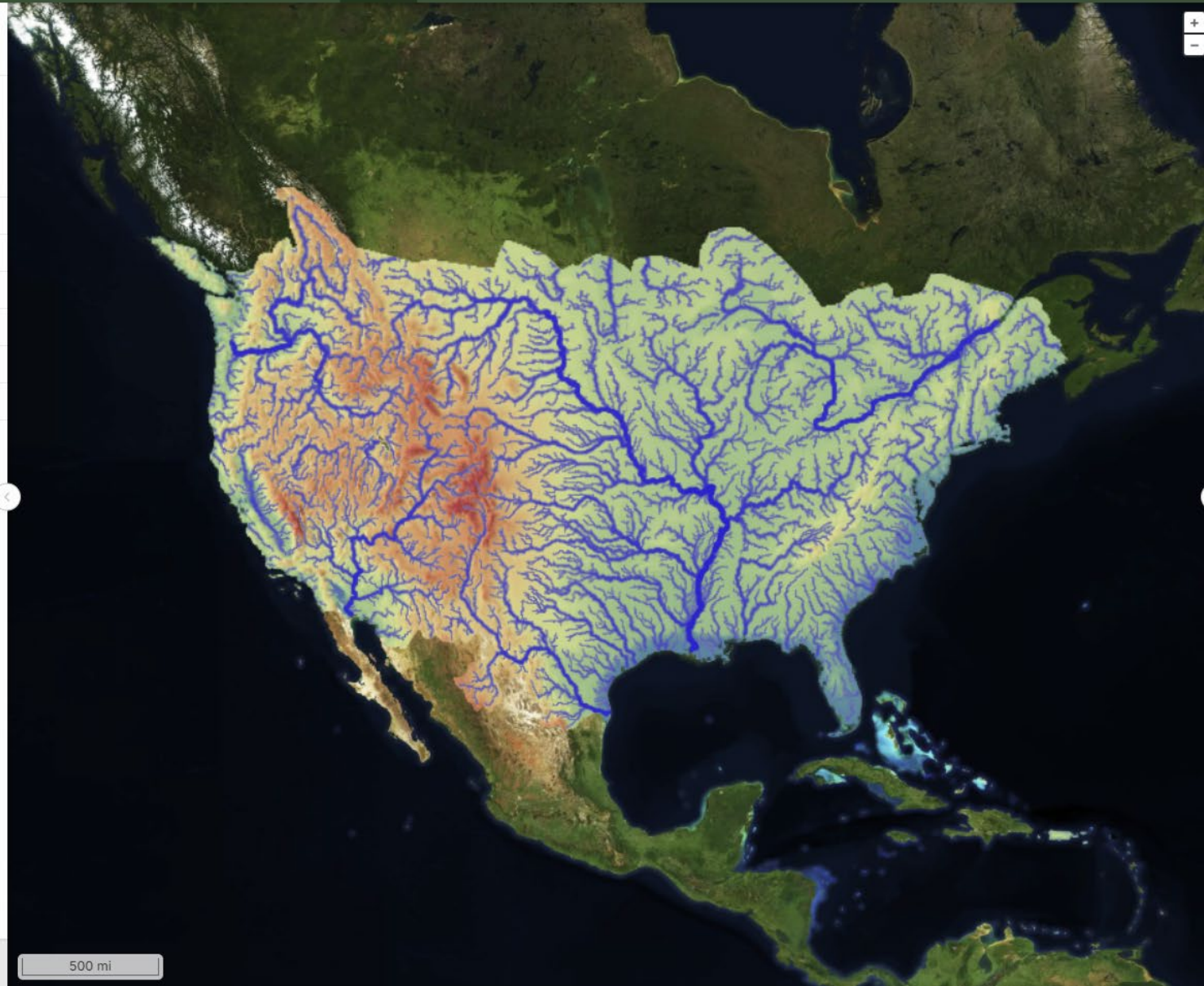
> Orthophoto

> Personal Layers

> Vector

▼ Base Map

- Streets & Places
- Topographic Map
- Orthophoto
- None



Depression-Free Flow

Flow Network Detail 400.00 mi²



The challenges

The solution



Budget pressure

Data collection and modeling take time

Less time on data processing, more time finding solutions



For flood modelers only

Current tools are powerful but difficult to use

Nationwide analyses that everyone can access



“Check this quickly, please”

Scope creep and meandering projects

“Sure! One sec while I open Scalgo Live”



Project communication

Viewing and sharing results can be difficult

Interactive visualizations and easy sharing

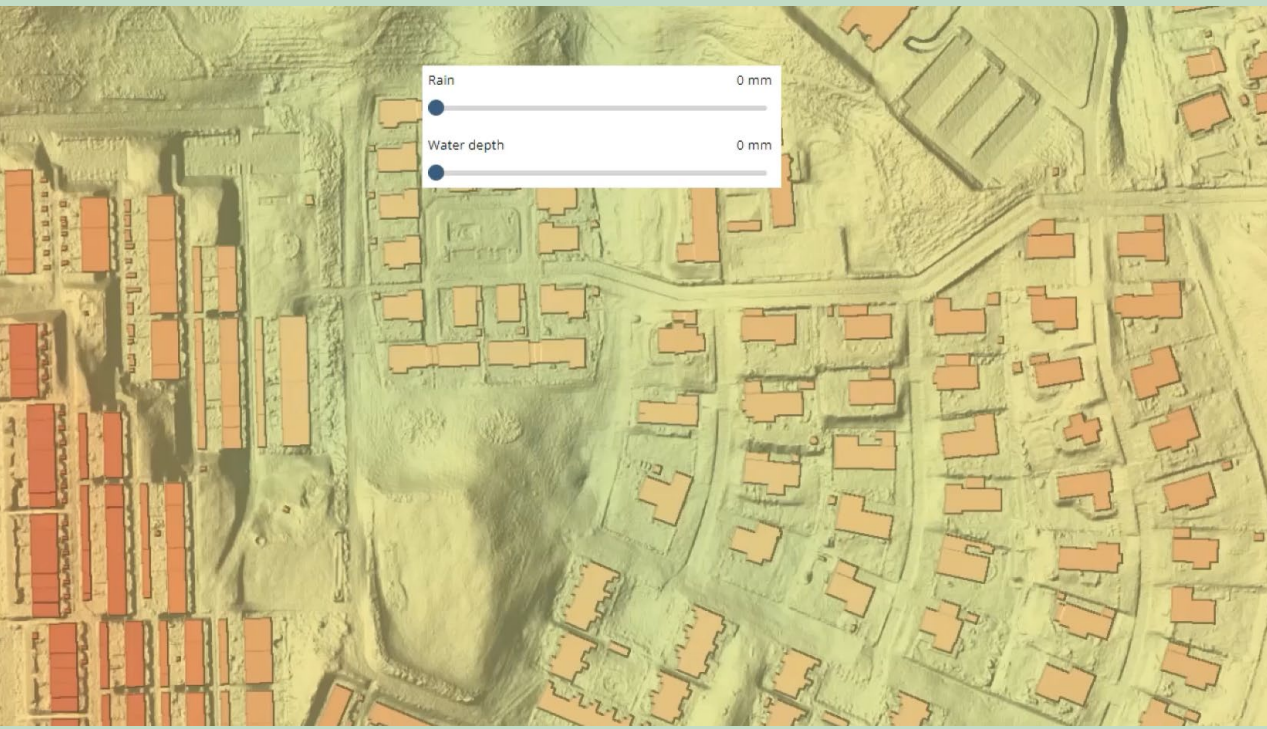


Ready-made analyses

Instant insight into hydrology

- Nationwide and detailed
- Watersheds, flooded areas, flow paths etc.
- Identify areas vulnerable flooding

1



Workspaces

Test ideas to find the solutions

- Terrain and land cover editing
- From quick tests to detailed landscapes
- See the effect on surface water

2



Canvas

Create your own maps

- Georeferenced annotations
- Document findings
- Share ideas with collaborators

3



Modelspaces

Store and share 2D simulations

- 2D results in the cloud
- Easily store and share massive files
- Access interactive visualizations

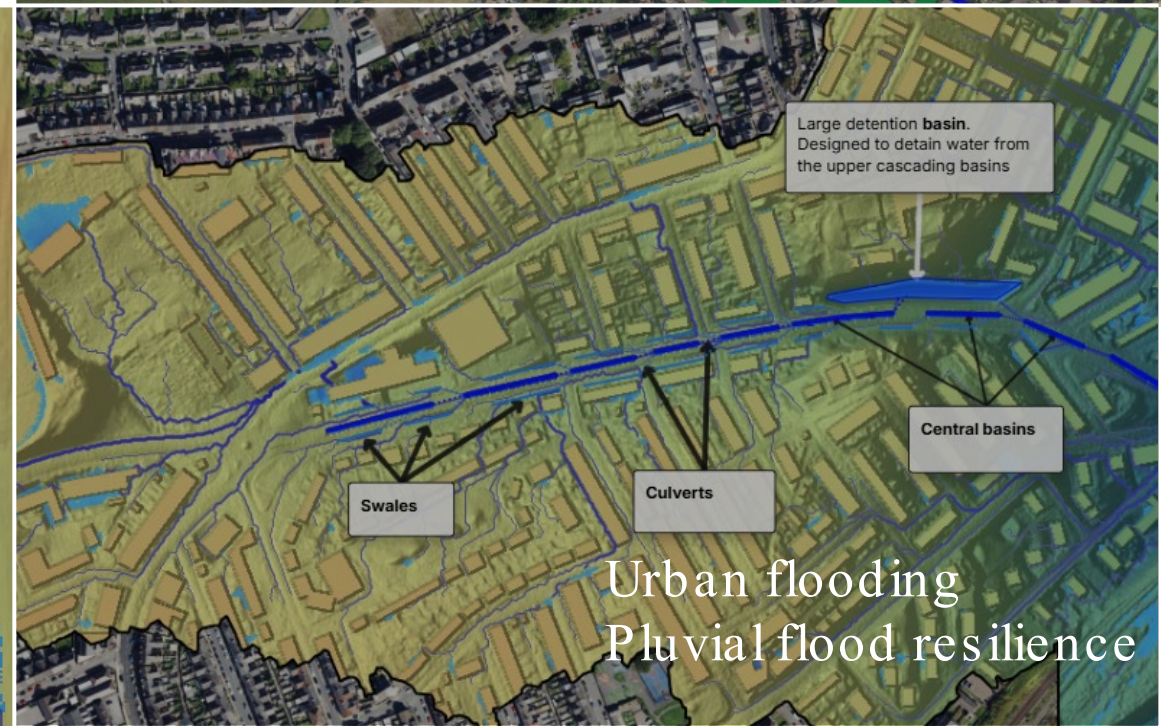
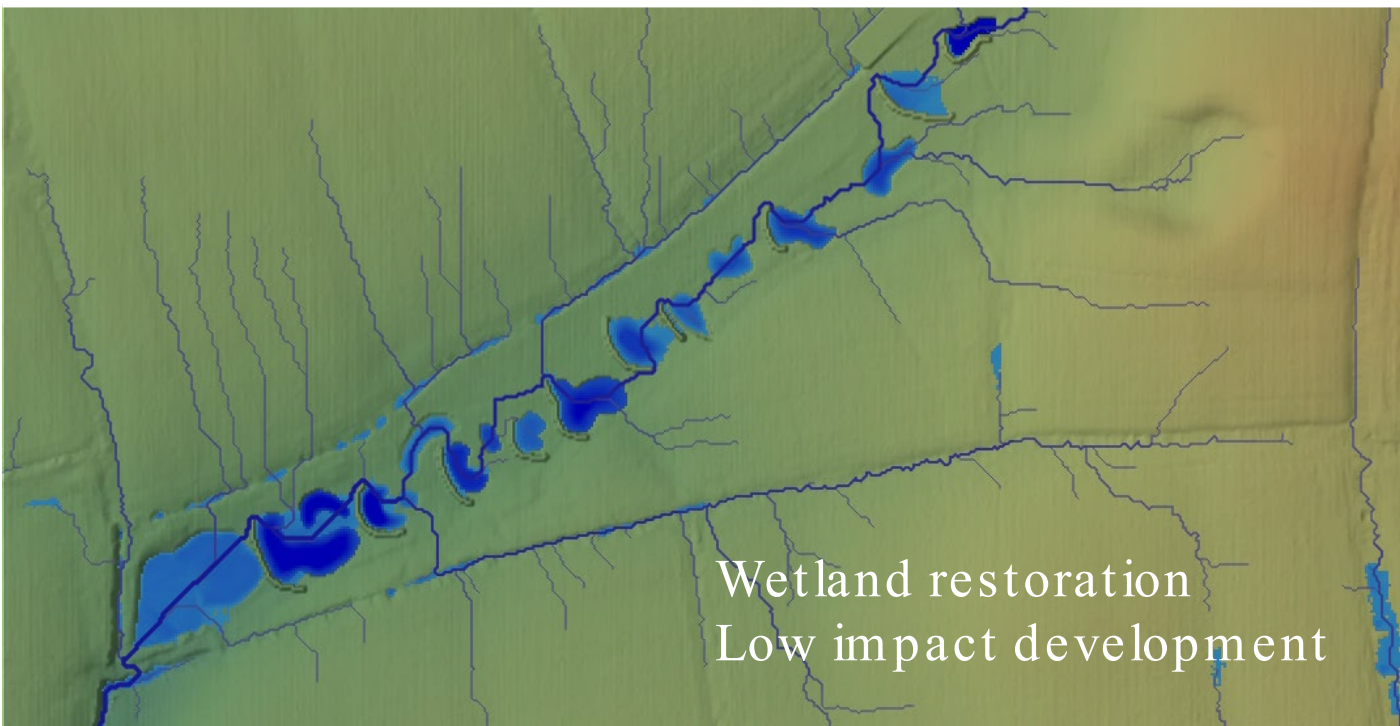
4



Broad application

Diverse users

Surface water, land use, and topography are central to a wide range of planning projects.





Enhance your project with Scalgo Live

1

Project start

From acquisition to kick-off
Real insights
Compelling graphics

2

Data collection

3

Existing conditions

4

Alternatives analysis

5

Detailed design



Enhance your project with Scalgo Live

1

Project
start

2

Data collection

High quality data
Less time on preparation
Interactive engagement

3

Existing
conditions

4

Alternatives
analysis

5

Detailed
design



Enhance your project with Scalgo Live

1

Project
start

2

Data
collection

3

Existing conditions

Efficient analysis
Instant mapping
Combined with local knowledge

4

Alternatives
analysis

5

Detailed
design



Enhance your project with Scalgo Live

1

Project
start

2

Data
collection

3

Existing
conditions

4

Alternatives analysis

Prototype alternatives

Identify early deal-breakers

Reserve detailed modeling for
promising options

5

Detailed
design



Enhance your project with Scalgo Live

1

Project
start

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Data
collection

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Existing
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Alternatives
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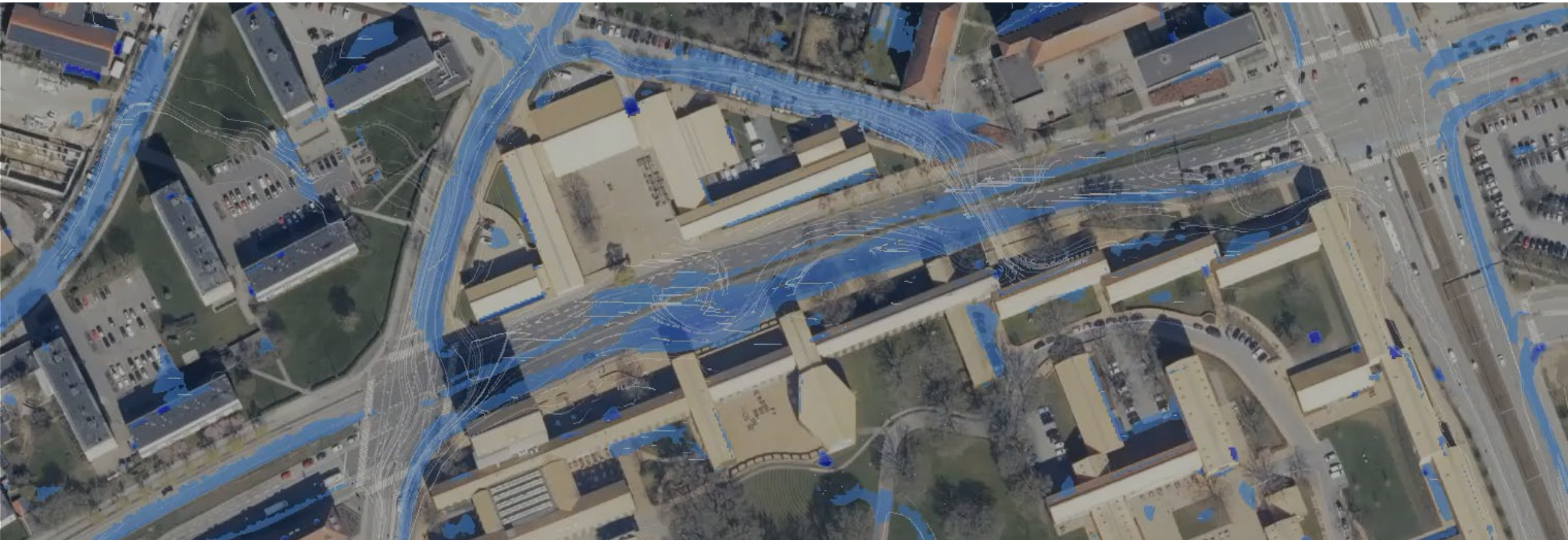
Detailed design

Export everything
3D site download
Store simulations



Core+
DynamicFlood
TUFLOW

The easiest way to
run flood simulations



A ready-to-go model with familiar data

Out-of-the-box experience:

- High-resolution terrain and land cover
- NOAA Atlas 14 rainfall data
- Soil Data
- Pre-selected parameters (infiltration, roughness, etc.)

Combined into a TUFLOW model



Create Workspace

Flash Flood Map

Choose a type of selection:





Name: FFMA DynamicFlood

create workspace



1

Create a Workspace around your area of interest

FFMA DynamicFlood    

Elevation Land Cover More

Description

Area: 1.51 mi²

Soil balance

Removed: 0.00 ft³
Added: 0.00 ft³
Soil surplus: 0.00 ft³

Elevation model: Terrain

Created: Mon, Jun 1, 2026, 12:45 PM
Recomputed: Mon, Jun 1, 2026, 01:03 PM
Last edit: Mon, Jun 1, 2026, 12:57 PM
Access rights: Can Edit

Actions

Import terrain model... ?

Recompute

Select analysis...

Run hydrodynamic engine...

Share ...

Duplicate

Delete workspace



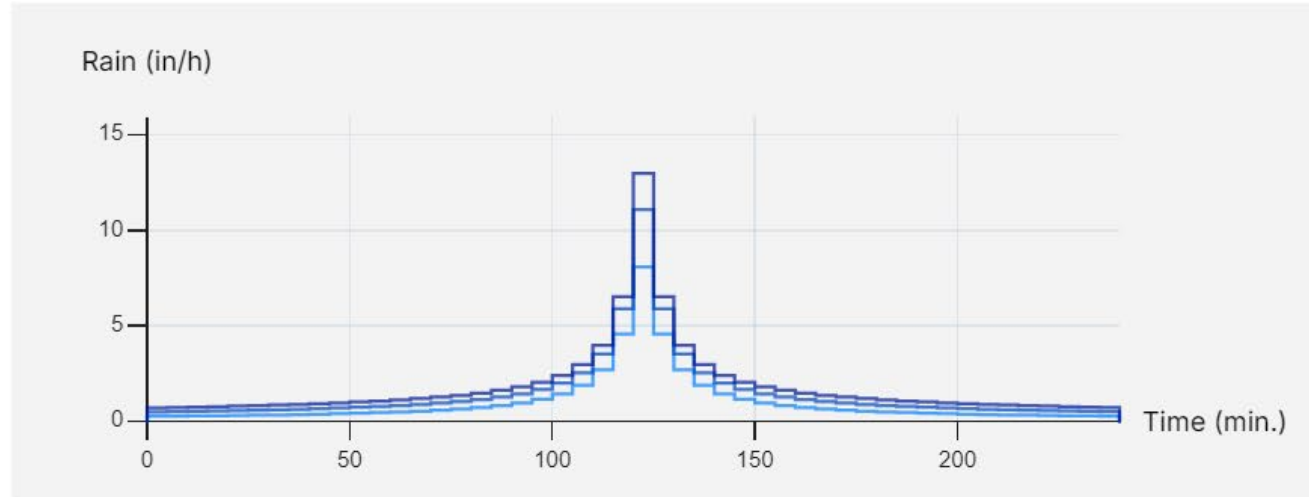
2

Click "Run hydrodynamic engine..."
in your Workspace toolbox

FFMA DynamicFlood HD results [🔗](#)

×

No description



Select Events



Current climate



T1

T2

T5

T10

T25

T50

T100

T200

T500

T1000

Default



Select Manning

Default



GPU status: Available



cancel

run

3

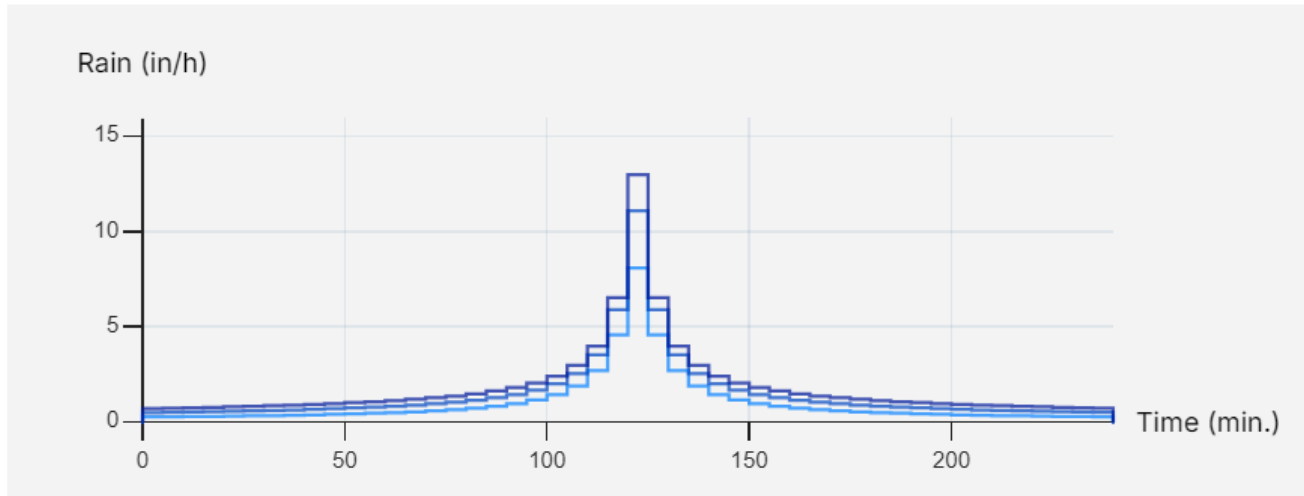
Select rainfall return periods

Or customize event duration, intensity, upload your own hyetograph

FFMA DynamicFlood HD results [🔗](#)



No description



Select Events

Current climate +

Select infiltration

Default +

Select Manning

Default +

GPU status: Available



cancel

run

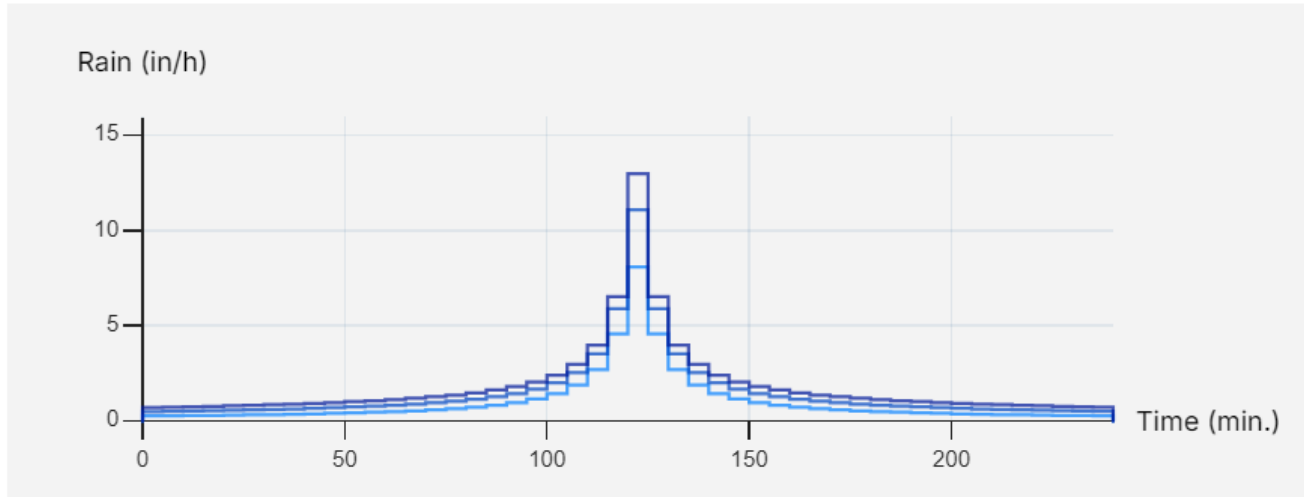
4

Use default infiltration and Manning's roughness parameters
Or customize with your own values

FFMA DynamicFlood HD results [🔗](#)



No description



Select Events

Current climate +

Select infiltration

Default

Select Manning

Default

GPU status: Available



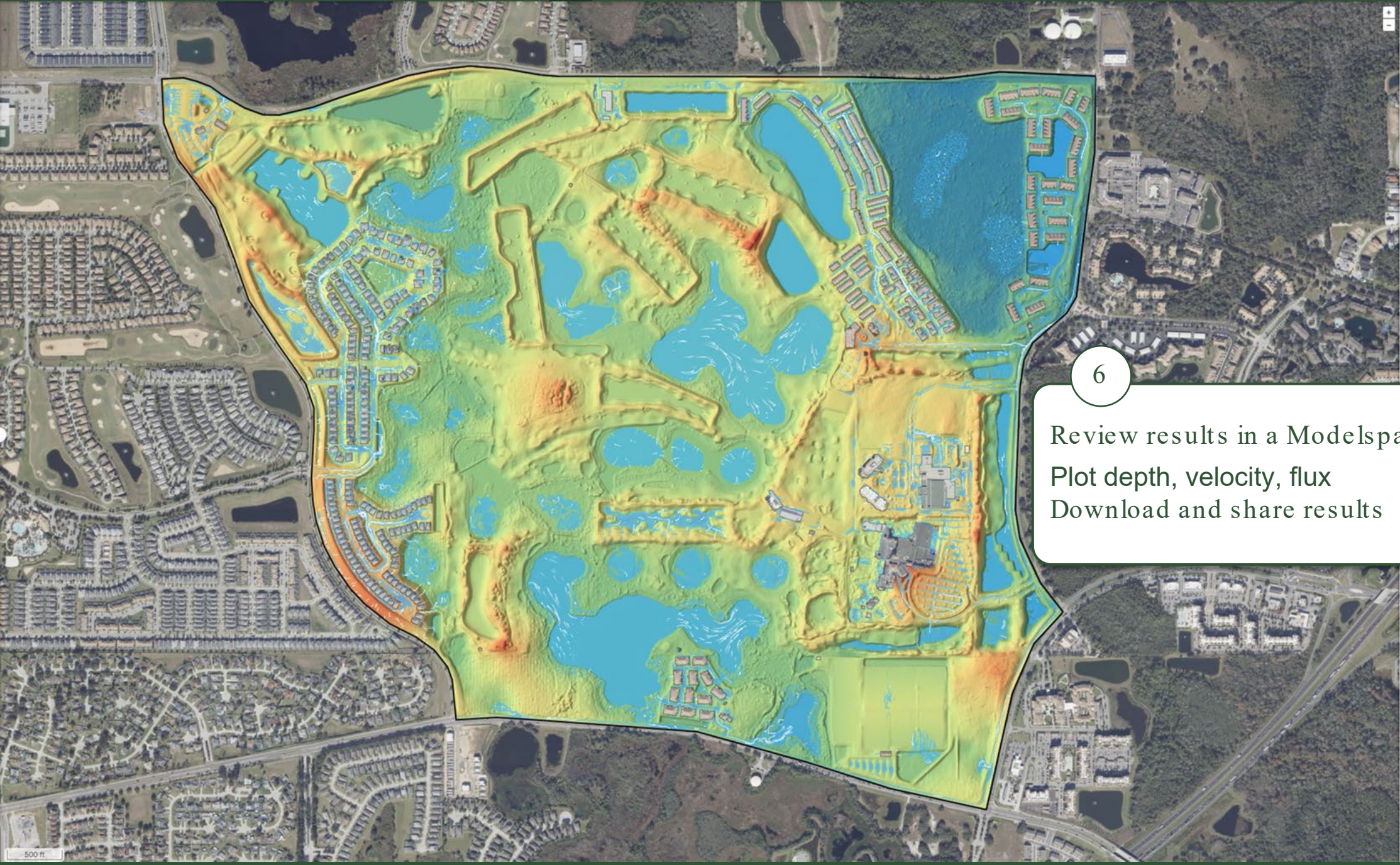
cancel

run

5

Run simulation

Customize model resolution or simulation duration, or keep defaults



Other layers

Time ||▶▶ 480x 01:20:00

Water depth 0.10 in

Velocity 0.03 ft/s

6

Review results in a Modelspace
Plot depth, velocity, flux
Download and share results

SCALGO

Thank you!

An aerial photograph of a city or town, overlaid with a semi-transparent blue map. The map highlights various water features, including rivers, streams, and ponds, in a vibrant blue color. The background shows the city's layout with buildings, roads, and green spaces.

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