

C2VSim Progress Report

IWFM User's Group
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Outline

Coarse-grid development

Fine-grid development

Coarse-grid vs Fine-Grid

Model changes



C2VSim Coarse-Grid

“C2VSim-CG 2015”

Finite Element Grid

- 3 Layers or 9 Layers
- 1393 Nodes & 1392 Elements

Surface Water System

- **103** ~~75~~ River Reaches, **2** ~~1~~ Lakes
- 243 Surface Water Diversions
- **50** ~~38~~ Inflows, **15** ~~11~~ Bypasses
- **200** ~~210~~ Small-Stream Watersheds

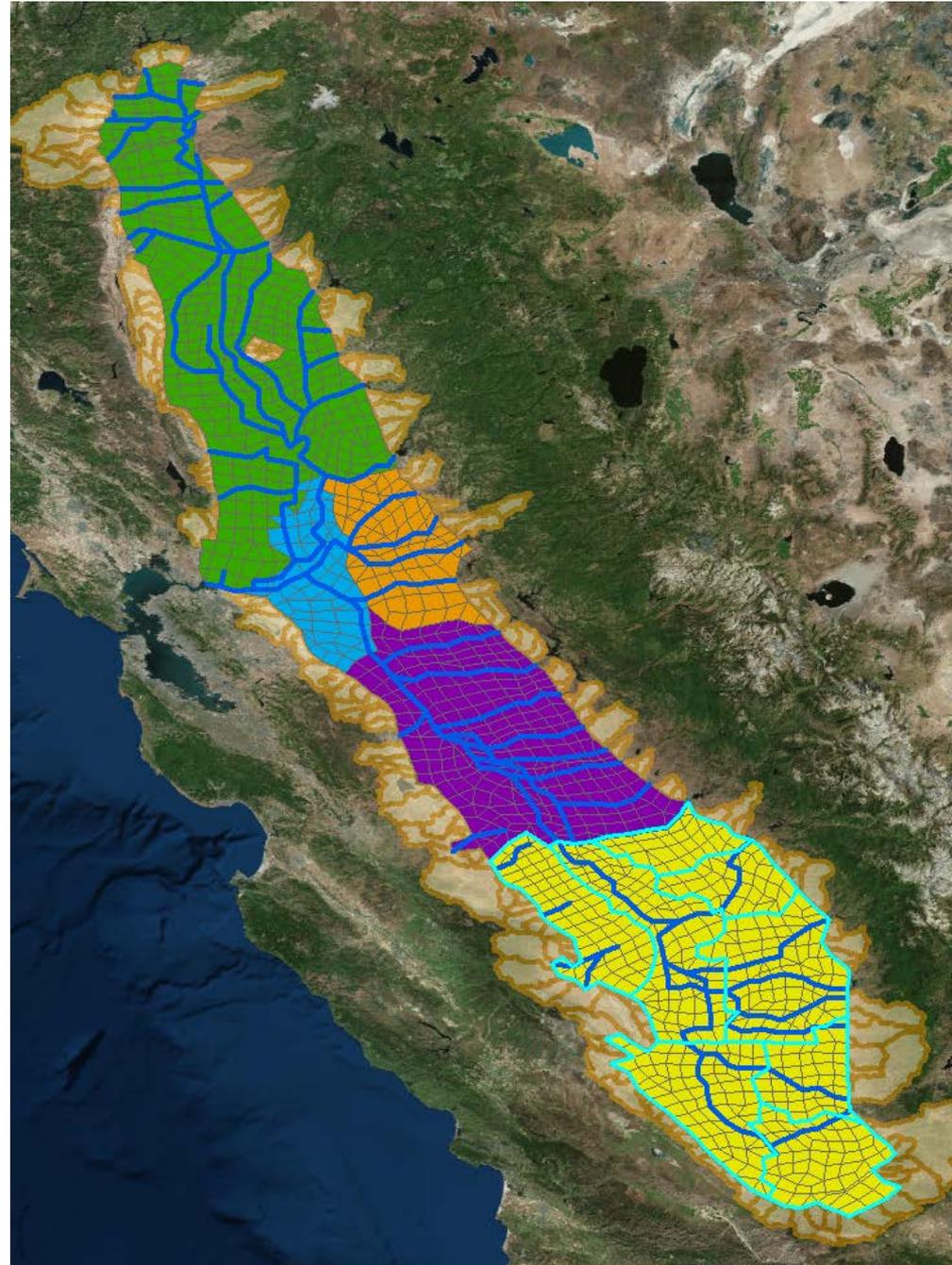
Land Use Process

- 21 Subregions (DSAs)
- 4 Land Use Types

Simulation period

- 10/1921-9/2015 (94 yrs)

IWFM-2015



C2VSim-FG

Using IWFM-2015

RMC Water and Environment

Phase 1 – Preprocessor

Draft delivered 7/2015

Phase 2 – Hydrology

In progress

Phase 3 – Land Use

Phase 4 - Calibration



C2VSim Fine-Grid

“C2VSim-FG 2015”

Finite Element Grid

- 3 Layers or 9 Layers
- 30,179 Nodes & 32,537 Elements

Surface Water System

- 110 River Reaches
- 243 Surface Water Diversions
- 50 Inflows, 15 Bypasses
- 1,080 Small-Stream Watersheds

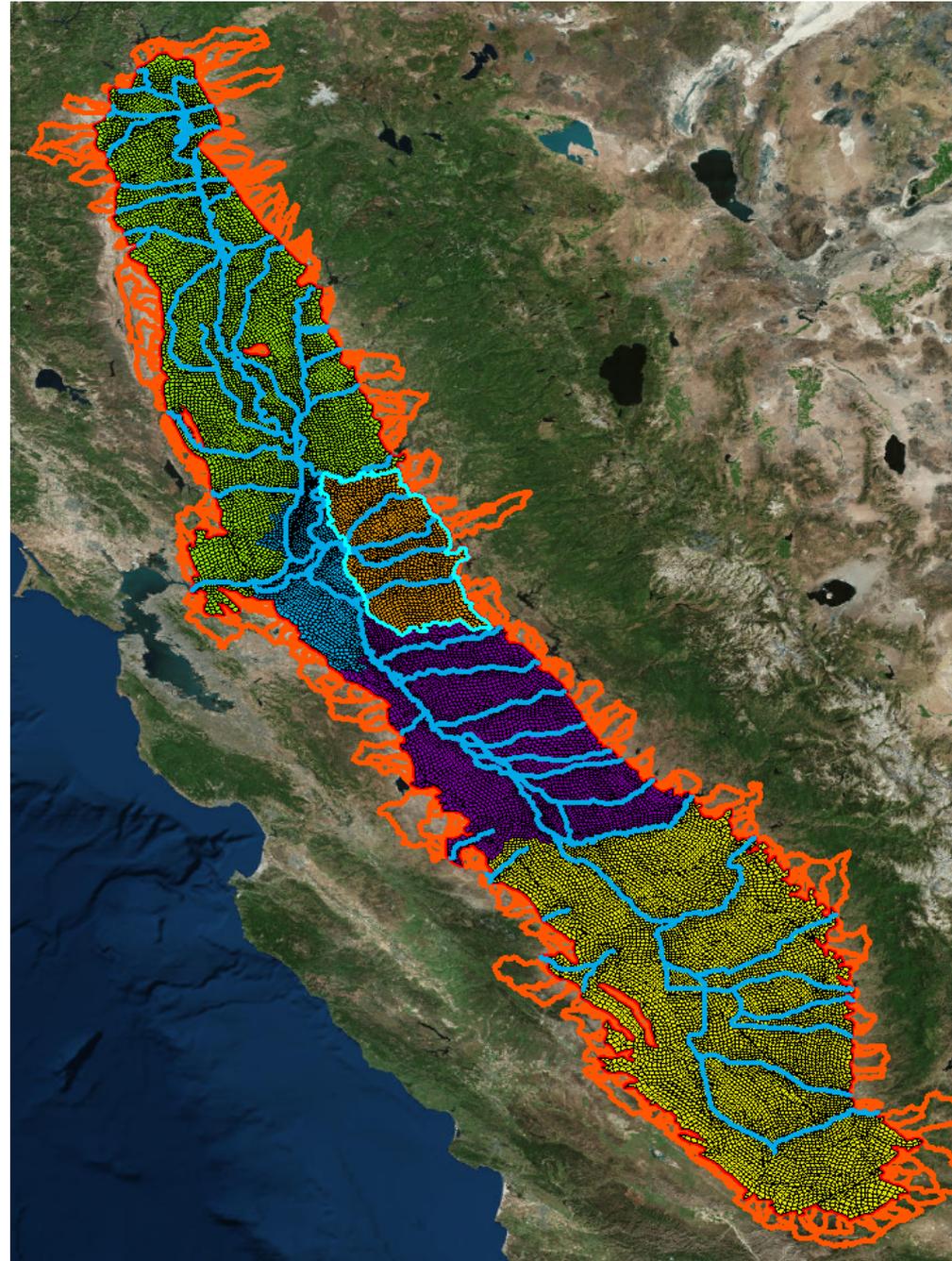
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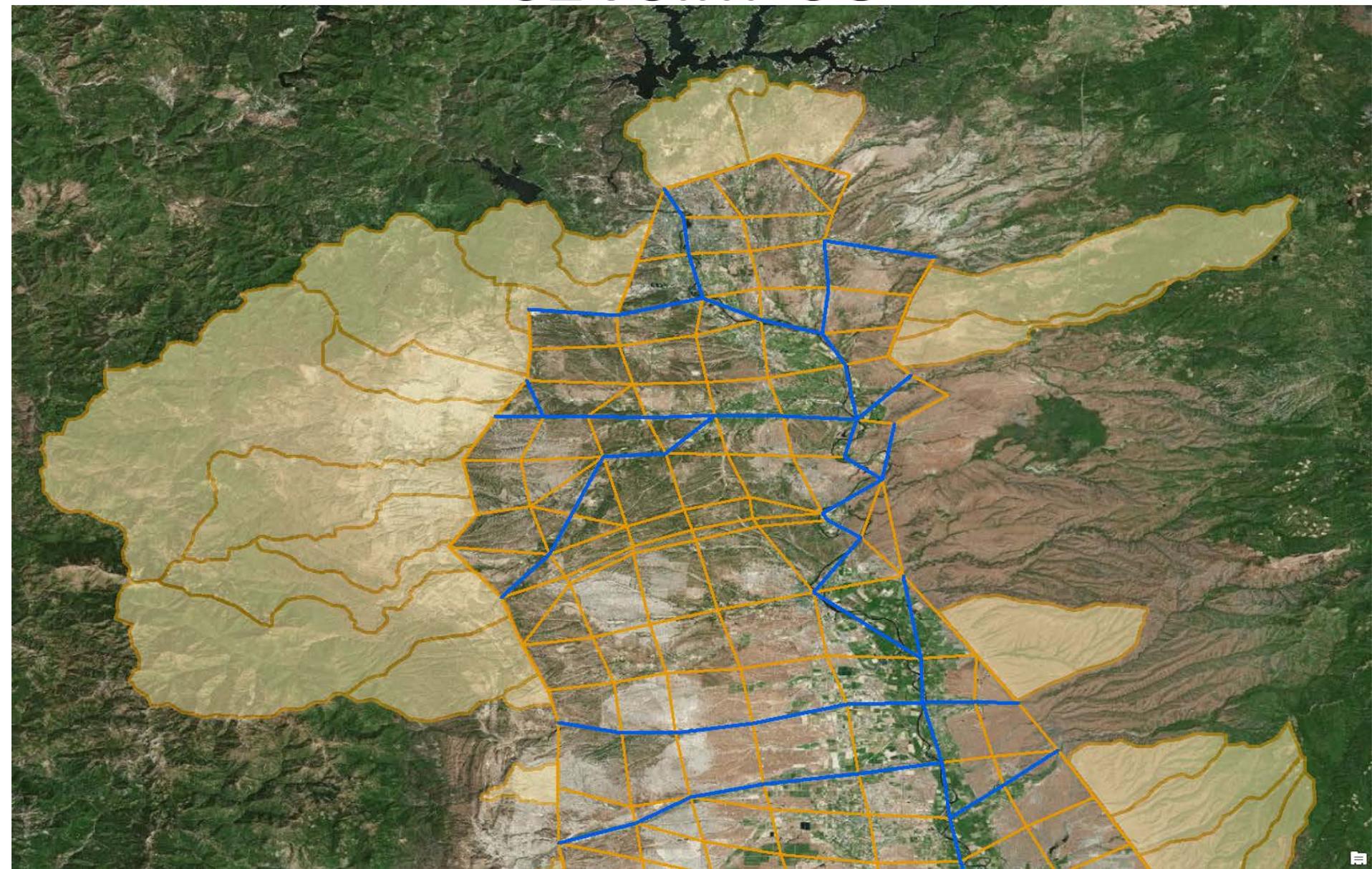
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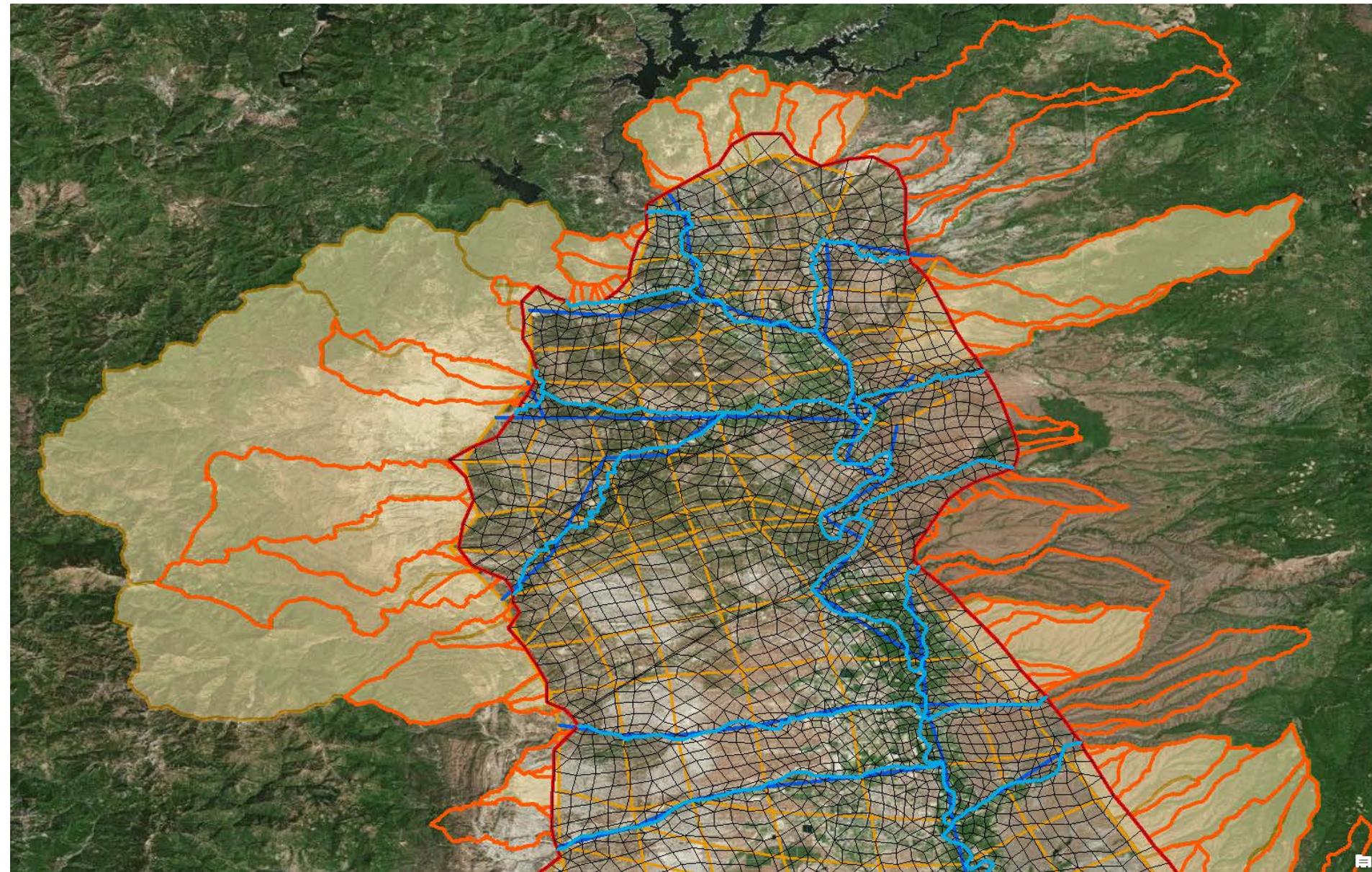
IWFM-2015



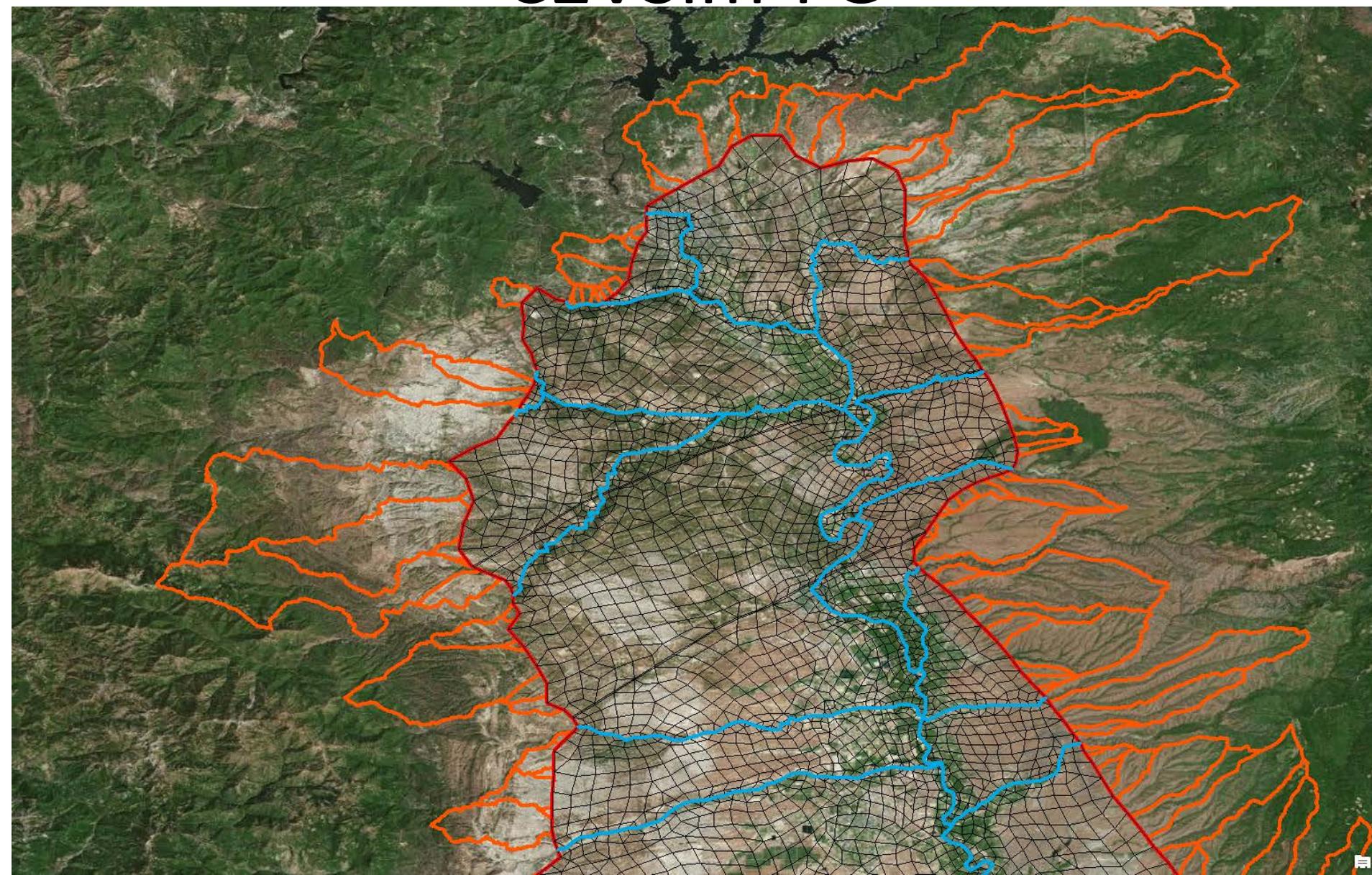
C2VSim-CG



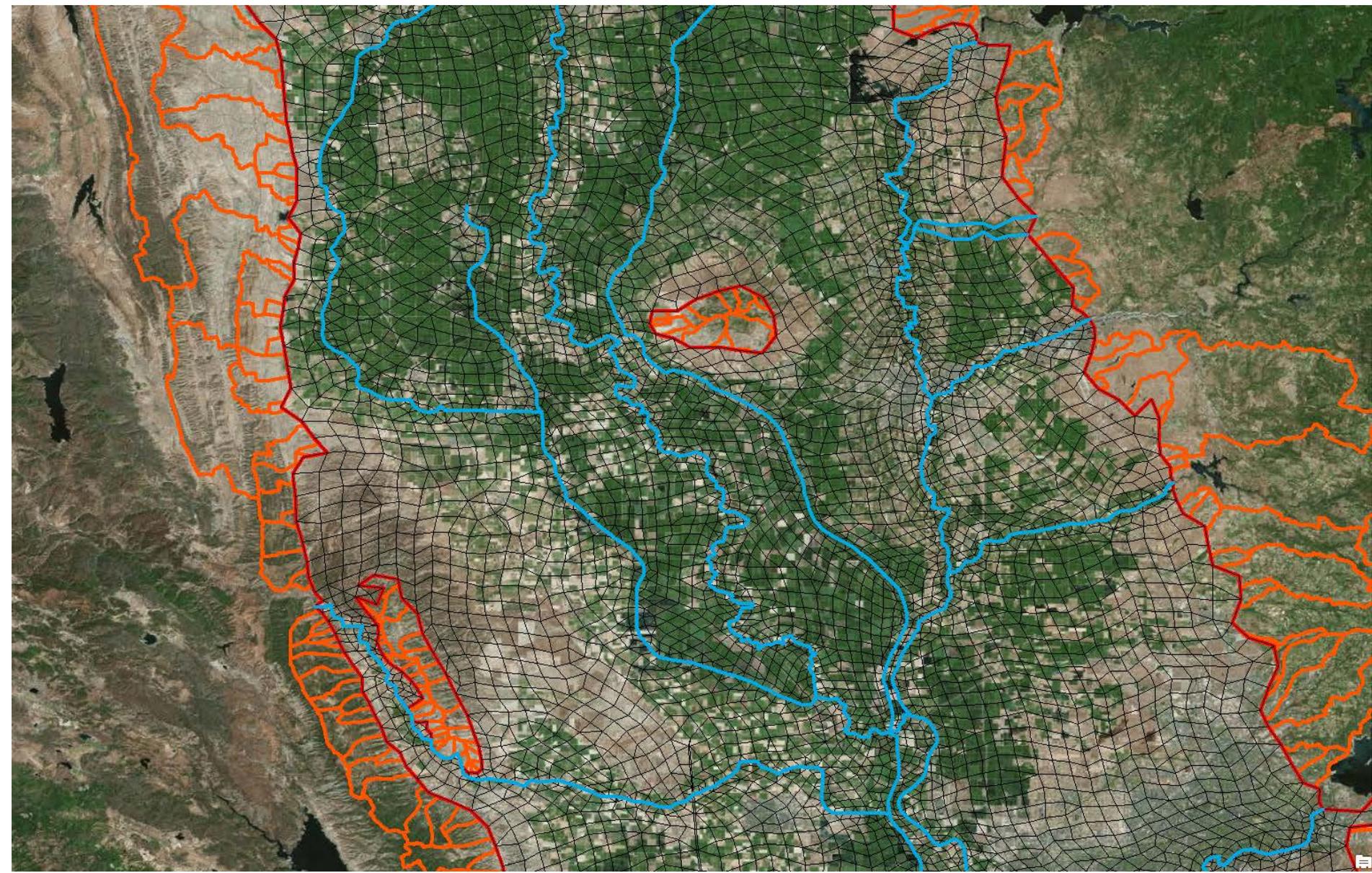
C2VSim-CG & C2VSim-FG



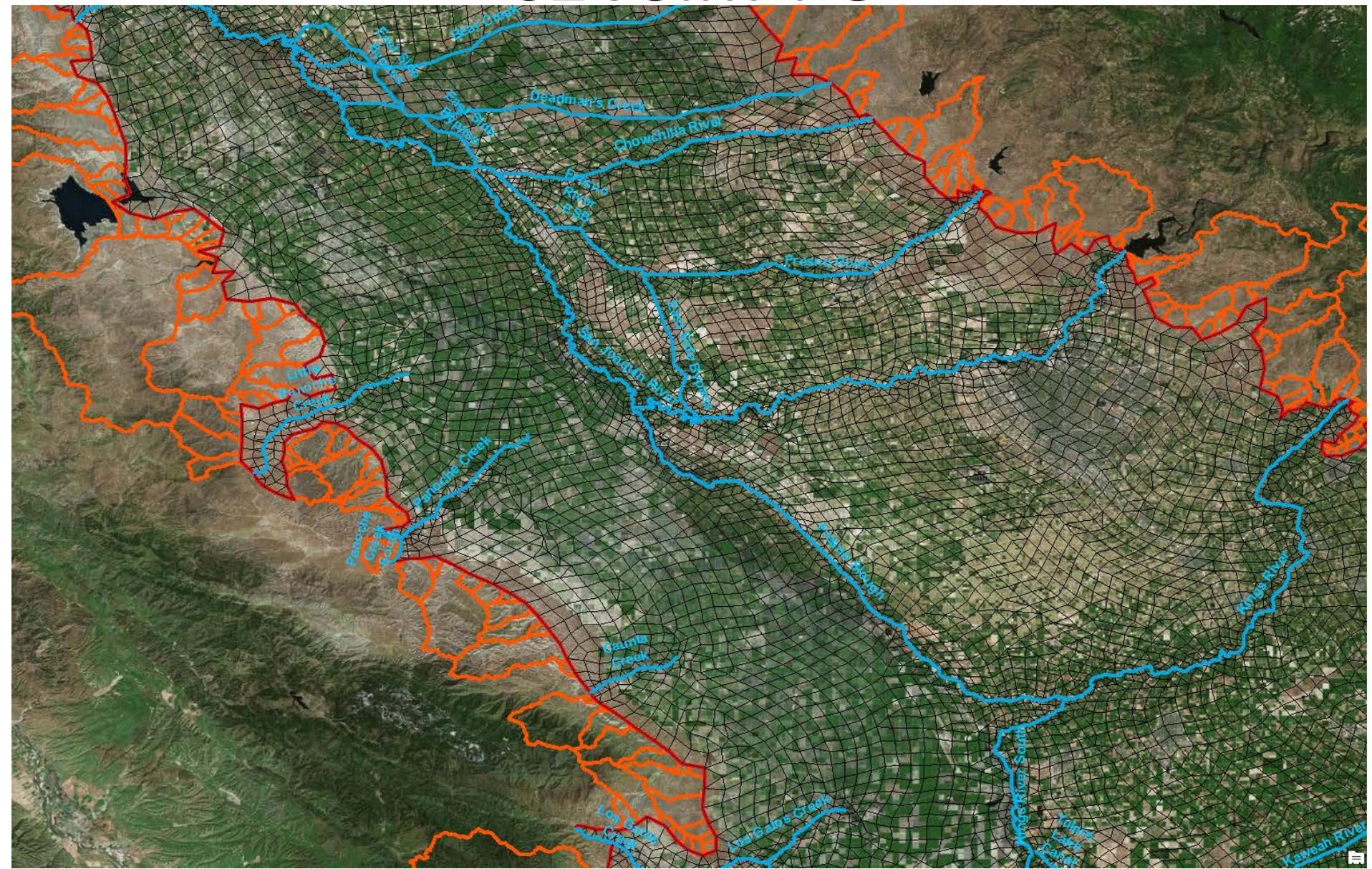
C2VSim-FG



C2VSim-FG



C2VSim-FG



C2VSim-FG



C2VSim-CG & C2VSim-FG

	C2VSim-CG	C2VSim-FG
Nodes	1,393	30,179
Elements	1,392	32,537
River nodes	472	4,634
River reaches	75	110



C2VSim-CG & C2VSim-FG

Element Size (Acres)

	C2VSim-CG	C2VSim-FG
Average	9,190	407
Minimum	1,365	4
Maximum	21,379	1,771



New River Reaches

Sacramento Valley

- Clear Creek
- Cottonwood Creek tributaries (North, Middle, South)
- Honcut Creek (North & South)

San Joaquin Basin

- East Side/Chowchilla Bypass
- Westside Streams (Little Panoche, Panoche, Cantua, Los Gatos)

Tulare Basin

- Deer Creek (Tulare County)
- White River
- Poso Creek



Next Steps

Complete hydrology through 9/2015

- New streams 10/1921-9/2015

Detailed stream-bed geometry

Detailed Land Use Snapshots

Contracting with Windstream Hosted
Solutions for model calibration

Completed Summer 2016?



Questions

