Next Steps

Stephen Hundt USGS November 16, 2022



Future meetings

- Quarterly MTAC meetings
- Next: Wednesday, February 15th?
- Spring 'kickoff meeting' in the Valley?
- Communication before next meeting
 - Model objectives / scenarios!!!
 - o Data
 - Other concerns or questions
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Decisions to make

- Model objectives / scenarios!
- Historic period
- Steady-state period
- Model extent (in the south in particular)
- ..



Additions to model (factory)

- Hydraulic parameter estimates and ranges from hydrogeology and pump tests
- Tributary inflow boundaries
- Mackay reservoir
- Steady-state head observation targets
- Steady-state flux observation targets
- Ability to add multiple layers
- Adapting water budget report values to model
- ...



Data to retrieve

- Pumping test data
- Older diversion data (not on IDWR site)
- Lidar for higher resolution stream and canal elevations
- ET above Mackay
- Pumping: transfer, irrigation, m&l

• ..



Data Still working

on our 'wishlist'

Model obiectives wi

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	Awaiting: Statewide LIDAR (~QI CY23)	
Land Cover	Have: MRLC	CONUS 2019, 2016, 2013, 2011, 2008, 2006, 2004, 2001
Irrigated Lands	Have: IDWR	ESRP 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2006, 2002, 2000, 1996
ET (METRIC)	Have: IDWR Need: Above Mackay, other years?	Some datasets missing above Mackay Reservoir ESPA 2021, 2020, 2019, 201, 2017, 2016, 2015, 2013, 2011, 2010, 2009, 2008, 2006, 2002, 2000, 1996, 1992, 196
Groundwater Levels	Have: IDWR, USGS	
Surface Water	Have: USGS Gages, Recent IDWR Diversion Data Need: Older diversion data; deliveries?	Streamflow Diversion from river
Previous GW Models	Have: ESPAM2.2, INL Model	
Geology	Have: IGS , USGS	Statewide surficial geology Basin geologic maps (where available) Hydrogeology
Hydrography	Have: USGS	NHD Plus HR
Pumping	Need: Anything!!	Transfer wells Irrigation wells Municipal and industrial
Pumping well logs		Open intervals; pump depths
Water rights – POD and POU		IDWR/WM: GW and SW
Precipitation		
Irrigation efficiency???		
Mackay stage		Obtain from WM/NWIS
Canal lining history		
Pumping tests		
River seepage		
		Could potentially estimate from LiDAR (if flown during non-irrigation season)

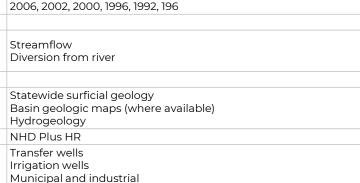
Have: 10m DEM

Status

Awaiting: Statewide LiDAR (~O1 CY23)

Data

Digital Elevation



Notes about it

Delays due to pandemic



Summary & Discussion

Quarterly meetings

We want model objective / scenario ideas!

Questions about the presentations?

Anything else?



Thanks!

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