



Safe Yield Data Collection and Evaluation

Workshop #1

November 16, 2021

Agenda

- Welcome and Introductions
- Background and Objectives
- Proposed Outline for Data Collection Annual Report
- Q&A
- Land Use Data Collection and Findings
- Q&A
- Next Steps and Schedule

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Background – April 28, 2017 Court Order

- April 28, 2017 Court Order
 - Approved current Safe Yield reset methodology
 - Included a provision to update the Safe Yield reset methodology
 - Required annual data collection, evaluation, and reporting
 - Required a peer review process

Background – April 28, 2017 Court Order

“4.5 – Annual Data Collection and Evaluation. *In support of its obligations to undertake the reset in accordance with the Reset Technical Memorandum and this order, Watermaster shall annually undertake the following actions:*

- a) Ensure that, unless a Party to the Judgment is excluded from reporting, all production by all Parties to the Judgment is metered, reported, and reflected in Watermaster’s approved Assessment Packages;*
- b) Collect data concerning cultural conditions annually with cultural conditions including, but not limited to, land use, water use practices, production, and facilities for the production, generation, storage, recharge, treatment, or transmission of water;*

Background – April 28, 2017 Court Order

“4.5 – Annual Data Collection and Evaluation. *In support of its obligations to undertake the reset in accordance with the Reset Technical Memorandum and this order, Watermaster shall annually undertake the following actions: [...]*

- c) *Evaluate potential need for prudent management discretion to avoid or mitigate undesirable results including, but not limited to, subsidence, water quality degradation, and unreasonable pump lifts. Where evaluation of available data suggests that there has been or will be a material change from existing and projected conditions or threatened undesirable results, then a more significant evaluation, including modeling, as described in the Reset Technical Memorandum, will be undertaken;*
- d) *As part of its regular budgeting process, develop a budget for the annual data collection, data evaluation, and any scheduled modeling efforts, including the methodology for the allocation of expenses among the Parties to the Judgment. Such budget development shall be consistent with section 5.4(a) of the Peace Agreement.”*

Considerations in scope development

- Comments on 2020 Safe Yield Recalculation
 - Comparison to prior work
 - Effects of planning data on groundwater response
- Discussions with Appropriative Pool responding to comments in July 2021
 - Clarifying process to evaluate data

Scope to Implement Court Order

- Collect and evaluate the following data:
 - Land use
 - Water use practices
 - Groundwater pumping (evaluate only)
 - Regional water infrastructure
- Prepare annual report
 - Recommend future updates to data collection/evaluation process
 - Recommend additional analyses/modeling (if necessary)

Meeting Goals

- Peer reviewers clearly understand the objectives and scope of work for the data collection/evaluation effort
- Peer reviewers provide input on the proposed outline for the annual report
- Communicate the findings of the land use data collection and evaluation effort

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Annual Report Outline

1. Introduction and Background
 - a. Safe Yield Court Order
 - b. 2020 Safe Yield Recalculation Report
2. Historical Groundwater Pumping Records/Estimates
 - a. Introduction and application to model
 - b. Summary of wells
 - c. Process to estimate unmetered pumping

Annual Report Outline

3. Cultural Conditions

a. Land Use

- i. Introduction and application to model
- ii. Historical data
- iii. Data sources and collection
- iv. New data
- v. Comparison and discussion

b. Water Use Practices

c. Groundwater Pumping

d. Regional Water Infrastructure

Annual Report Outline

4. Assessment and Recommendations

- a. Do the data suggest a material change from existing and projected conditions or threatened undesirable results?
- b. Recommendations for future data collection, reporting and additional analyses

5. References and Appendices

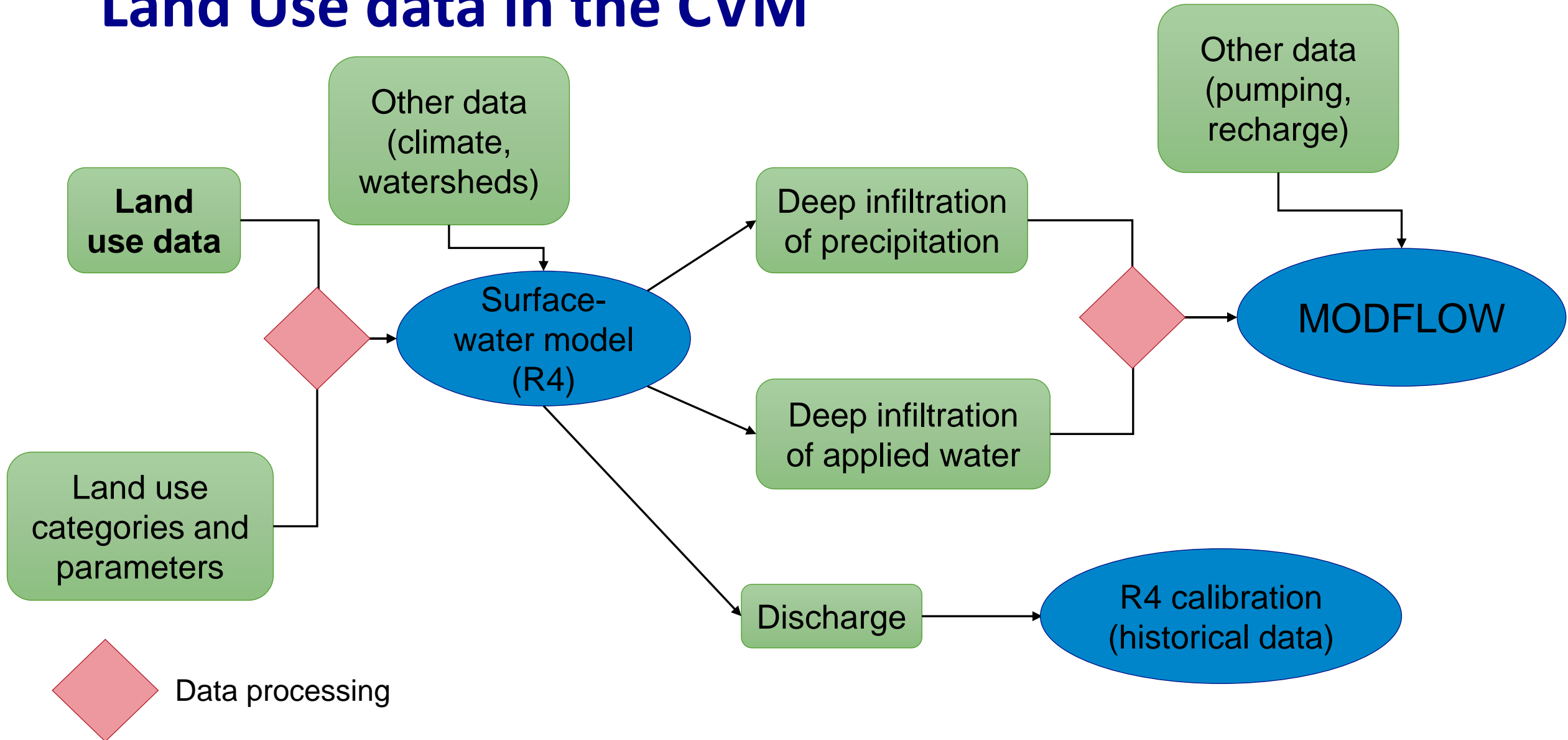
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Land Use data in the CVM



◆ Data processing

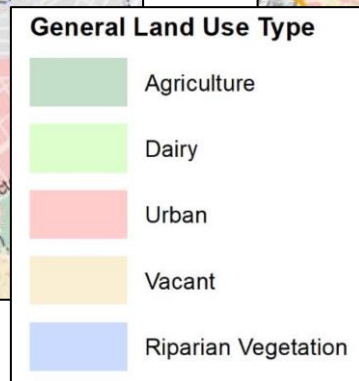
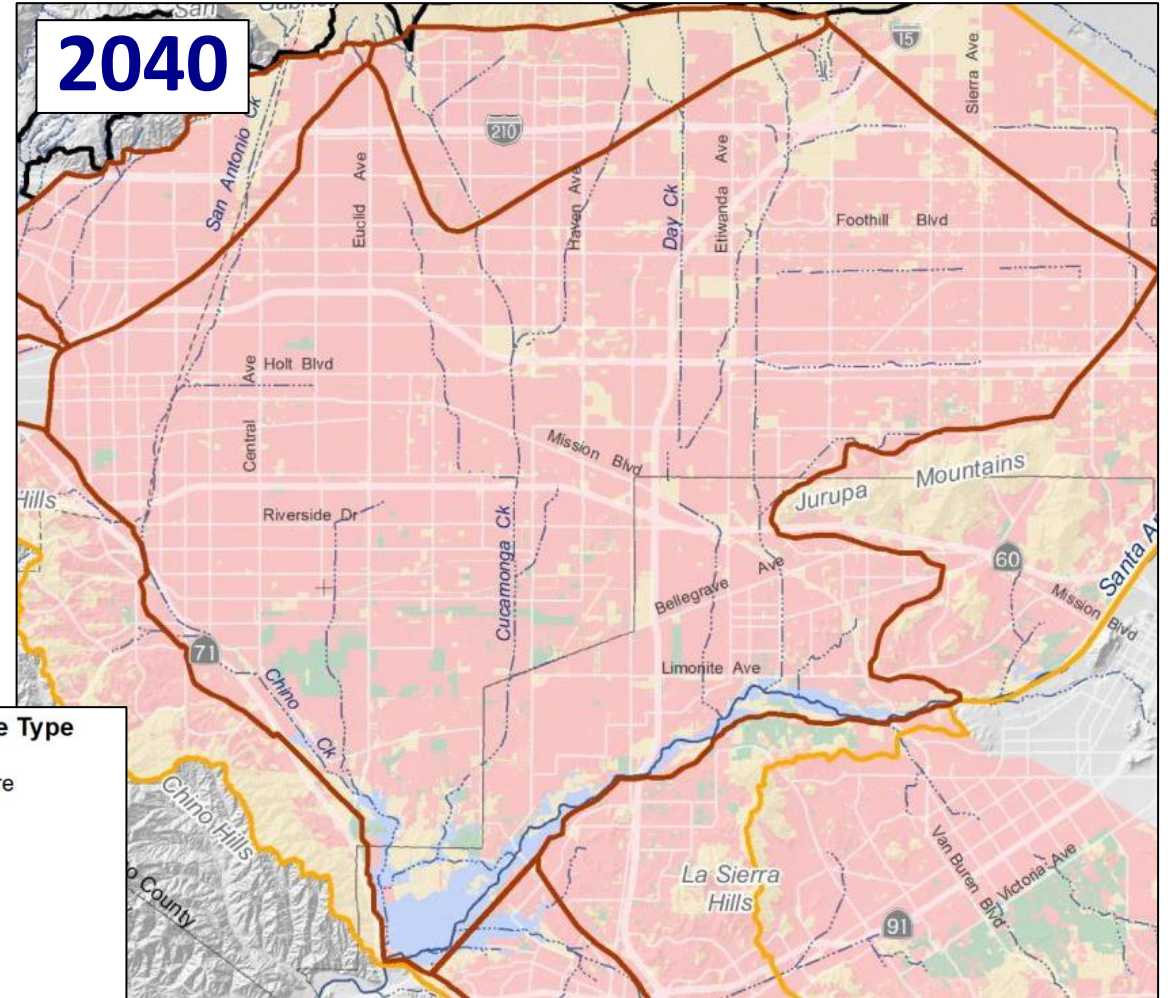
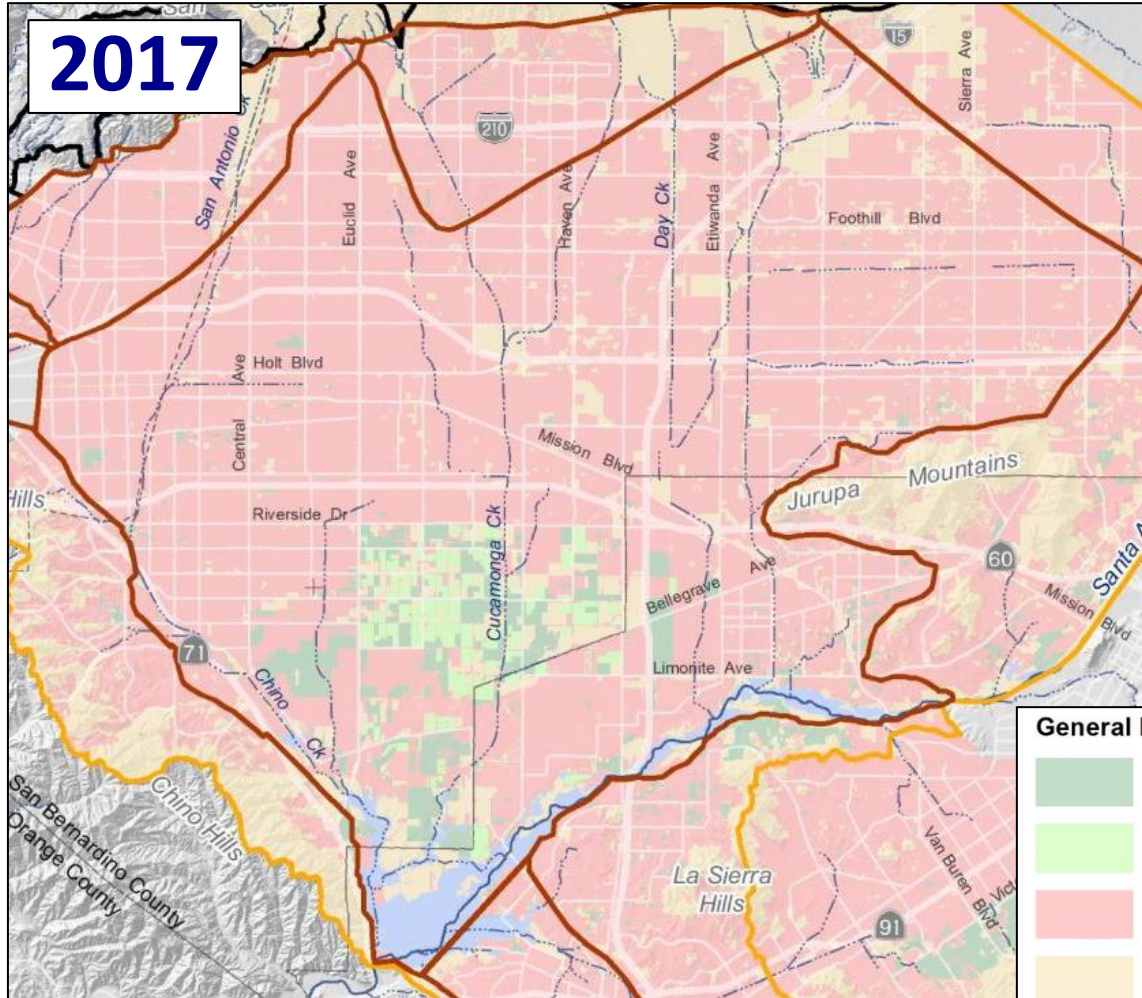
Land Use Data Collection and Evaluation

- Objective:
 - Understand the differences between the land use assumptions in the CVM Safe Yield Recalculation model runs to actual land use and most recent projections
 - Understand how these differences can impact the SY
 - Determine whether “there has been or will be a material change from existing and projected conditions or threatened undesirable results” (Court Order paragraph 4.5.c)

Land Use Data Collection and Evaluation

- Buildout years and buildout rates were estimated for each Appropriative Pool party's service area.
- Agricultural lands were converted to urban uses based on the Appropriative Pool parties' build rates and current (2017) land use—this produced a projected time-history of agricultural land uses in each Appropriative Pool party's service area.

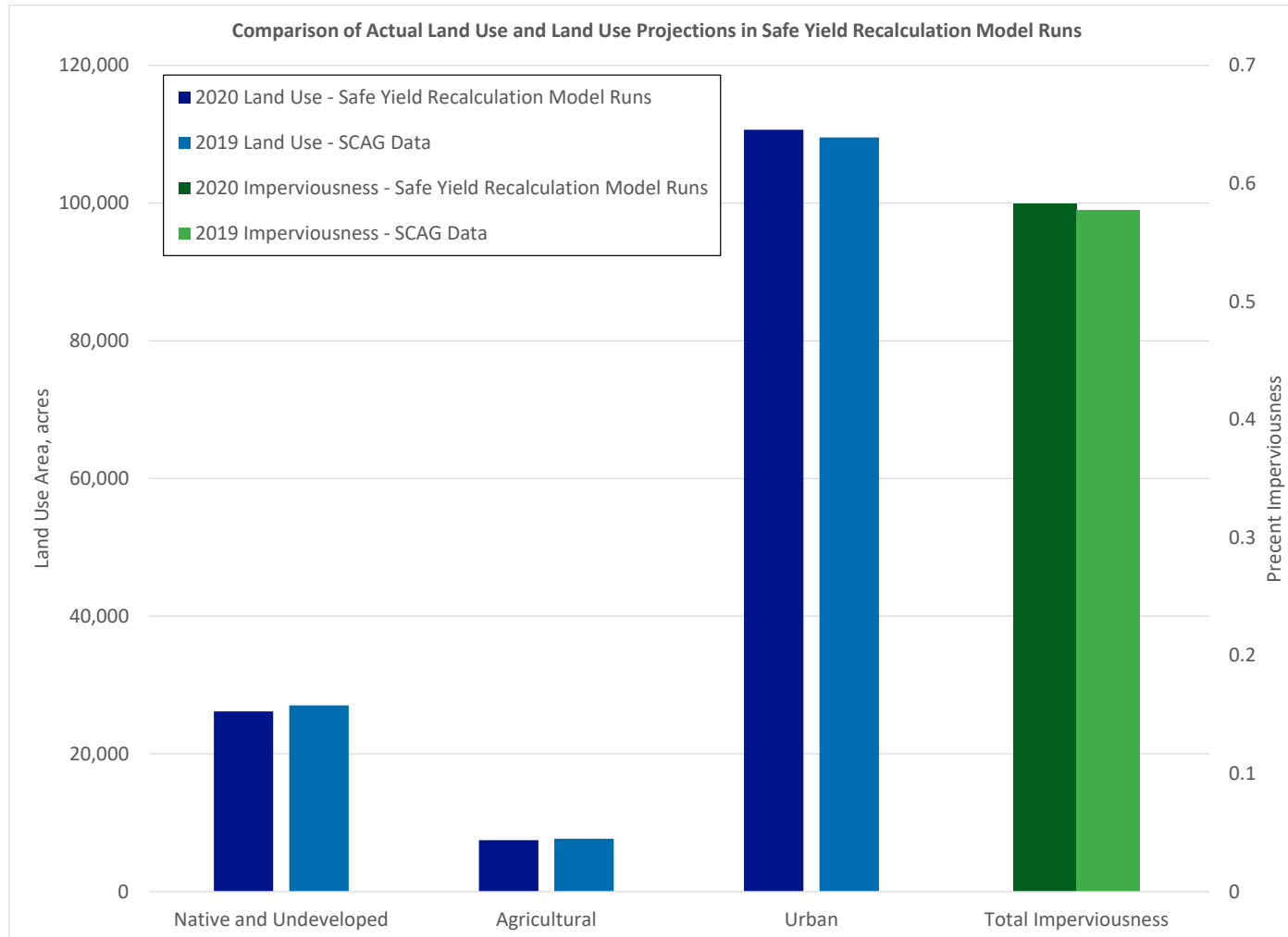
Land Use Data – 2020 Safe Yield Recalculation



Land Use Data Collection and Evaluation

- Methodology:
 - Compare the most recent land use data available (2019 SCAG data) to model assumptions on 2020 land use (2017 SCAG data).
 - Estimate the differences in land use by category and imperviousness under 2020 conditions.
 - Compare the most recent agricultural land conversion estimates (based on the 2020 UWMP) to the model assumptions on agricultural land conversion (based on water supply projections developed in 2017).
 - Estimate the differences in land use conversion in future conditions.

2020 Land Use



- Differences in area by major land use category are less than 3 percent
- Differences in percent imperviousness are less than 1 percent
- These differences are likely overestimated because actual data is based in 2019 land use

Future Land Use Data Projections

- 2020 Safe Yield Recalculation – based on General Plan land use data
- Buildout years for Parties with agricultural land in service area:
 - Ontario – 2040 (both in 2015 UWMP and 2020 UWMP)
 - Chino – 2040 (both in 2015 UWMP and 2020 UWMP)
 - JCSD – 2039 (2015 UWMP) and 2035 (2020 UWMP)

Conclusion of Impacts

- Evaluation of the land use data does not suggest a material change from existing and projected conditions or threatened undesirable results
- Land use data will be evaluated cumulatively with the other data collected in future steps

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Next Steps and Schedule

- Summarize feedback from today's workshop
- Future workshops/deadlines:
 - **Wednesday 3/2/22** – presentation of groundwater production, water use, and regional water infrastructure (Workshop #2)
 - **Thursday 3/31/22** – release of draft annual data collection report
 - **Tuesday 4/26/22** – review of draft report (Workshop #3)



THANK YOU