

Notice and Agenda of a Workshop of the Yucaipa Sustainable Groundwater Management Agency

Wednesday, September 25, 2019 at 10:00 a.m.

City of Yucaipa, 34272 Yucaipa Boulevard
Yucaipa, California 92399
(909) 797-2489 | www.yucaipasgma.org

- I. **Call to Order**
- II. **Roll Call**
- III. **Introductions of Board Members and Public Participants**
- IV. **Public Comments** At this time, members of the public may address the representatives of the Yucaipa Groundwater Sustainability Agency on matters within its jurisdiction.
- V. **Review and Approval of Meeting Minutes**
 - A. Meeting Minutes - August 28, 2019 [[Page 3 of 8](#)]
- VI. **Discussion Items**
 - A. Development of a Water Budget for the Yucaipa Region [[Page 6 of 8](#)]
 - B. Discussion and Demonstration of a Database Management System
 - Review of the Draft Database Management System Request for Proposals
 - C. Discussion and Update on the Proposed Construction of Stream Gaging Site(s) by the Department of Water Resources (DWR)
 - D. Review of Possible Sustainable Groundwater Management Act Funding Opportunities
 - E. Status Report on the Sustainable Groundwater Management Act Grant and Financial Status - Bob Tincher [[Page 8 of 8](#)]
- VII. **Topics for Future Meetings**
 - Discuss potential recharge projects to be included in the groundwater model - February 2020
 - Discussion regarding groundwater dependent ecosystems - pending
- VIII. **Comments by Board of Directors**
- IX. **Announcements - Future Meetings**
 - A. Wednesday, October 23, 2019 at 10:00 am - **Board Meeting**
 - B. Wednesday, January 22, 2020 at 10:00 am - **Board Meeting**
 - C. *Public Meeting No. 1 - Yucaipa Performing Arts Center, 12062 California Street, Yucaipa, California - Date and location to be determined*
 - D. Wednesday, February 26, 2020 at 10:00 am - Workshop
 - E. Wednesday, March 25, 2020 at 10:00 am - Workshop
 - F. Wednesday, April 22, 2020 at 10:00 am - **Board Meeting**
- X. **Adjournment**

Roll Call - Board of Directors

	Present	Present
	Primary Representative	Alternative Representative
Purveyors		
South Mesa Water Company	David Armstrong	George Jorritsma
South Mountain Water Company	Bob Martin	Rolland Moore
Western Heights Water Company	Mark Iverson	Tim Green
Yucaipa Valley Water District	Joseph Zoba	Jennifer Ares
Municipals		
City of Redlands	Cecilia Griego	Kevin Watson
City of Yucaipa	Ray Casey	Fermin Preciado
Regionals		
San Bernardino Valley MWD	Doug Headrick	Bob Tincher
San Gorgonio Pass Water Agency	Jeff Davis	Leonard Stephenson
* Quorum of the Board of Directors requires a total of five Purveyor, Municipal, Regional Members		
Stakeholders		
County of Riverside	Steve Horn	Jeff Johnson
County of San Bernardino	Bob Page	- -
City of Calimesa	Lori Askew	Bonnie Johnson

Future Dates and Milestones

The dates provided below are subject to change.

Public Presentation of the Goals and Objectives of the Groundwater Sustainability Plan - Meeting Number 1	TBD
Distribution of the Administrative Draft of the Yucaipa SGMA Groundwater Sustainability Plan	Monday, July 20, 2019
Release of the Draft Yucaipa SGMA Groundwater Sustainability Plan for Public Comment	Monday, January 18, 2021
Final Groundwater Sustainability Plan Submitted to the Department of Water Resources for Review and Approval	Monday, May 24, 2021

MINUTES OF THE YUCAIPA SUSTAINABLE GROUNDWATER MANAGEMENT AGENCY

August 28, 2019 - 10:00 a.m.

City of Yucaipa, 34272 Yucaipa Boulevard, Yucaipa, California

I. Call to Order - Chairman Mark Iverson called the meeting to order at 10:00 a.m.

II. Roll Call - The following representatives, as assigned by each Party, attended the meeting:

Purveyors	Present	Primary Representative	Present	Alternative Representative
South Mesa Water Company	✓	David Armstrong	✓	George Jorritsma
South Mountain Water Company	✓	Bob Martin	_____	Rolland Moore
Western Heights Water Company	✓	Mark Iverson	✓	Tim Green
Yucaipa Valley Water District	✓	Joseph Zoba	✓	Jennifer Ares
Municipals				
City of Redlands	✓	Cecilia Griego	_____	Kevin Watson
City of Yucaipa	_____	Ray Casey	✓	Fermin Preciado
Regionals				
San Bernardino Valley MWD	_____	Doug Headrick	✓	Bob Tincher
San Gorgonio Pass Water Agency	_____	Jeff Davis	✓	Leonard Stephenson
Stakeholders				
County of Riverside	_____	Steve Horn	_____	Jeff Johnson
County of San Bernardino	_____	Bob Page	_____	
City of Calimesa	_____	Lori Askew	_____	Bonnie Johnson

A quorum of the Board of Directors was present to start the meeting.

III. Introductions of Board Members and Public Participants - In addition to the Board of Directors identified above, the following members of the public attended the meeting.

- Madeline Blua - Yucaipa Valley Water District
- Jim Crampton - South Mesa Mutual Water Company
- Bruce Granlund - Yucaipa Valley Water District
- Lonni Granlund - Yucaipa Valley Water District
- Derek Hoffman - Gresham Savage / South Mesa Mutual Water Company
- Matt Howard - San Bernardino Valley Municipal Water District
- Ben Kelly - Western Heights Mutual Water Company
- Paul Kielhold - San Bernardino Valley Municipal Water District
- Mike Kostelecky - Yucaipa Valley Water District
- Greg Mendez - USGS

- Mike Podegracz - Charles Abbott / City of Yucaipa
- Steve Stuart - Dudek

IV. Public Comments – None.

V. Review and Approval of Meeting Minutes

- A. Meeting Minutes - May 22, 2019
- B. Special Meeting - Presentation to Elected Officials - June 19, 2019
- C. Meeting Minutes - June 26, 2019
- D. Meeting Minutes - July 24, 2019

David Armstrong moved to approve the minutes for June 19, 2019, June 26, 2019, and July 24, 2019. Leonard Stephenson seconded the motion.

South Mesa Water Company	Yes
South Mountain Water Company	No
Western Heights Water Company	No
Yucaipa Valley Water District	No
City of Redlands	--
City of Yucaipa	--
San Bernardino Valley MWD	No
San Gorgonio Pass Water Agency	Yes

The motion failed to be approved.

Joseph Zoba moved to approve the minutes for May 22, 2019, June 19, 2019, June 26, 2019, and July 24, 2019. Bob Tincher seconded the motion.

South Mesa Water Company	No
South Mountain Water Company	Yes
Western Heights Water Company	Yes
Yucaipa Valley Water District	Yes
City of Redlands	Yes
City of Yucaipa	Yes
San Bernardino Valley MWD	Yes
San Gorgonio Pass Water Agency	No

The motion was approved.

VI. Discussion Items

- A. Discussion Regarding a Database Management System

Bob Tincher and Steve Stuart provided an overview of the water in storage in the Yucaipa Basin and the concept of collecting data in a Database Management System to prepare for future updates of the Groundwater Sustainability Plan.

B. Update on the Proposed Construction of Stream Gaging Site(s) by the Department of Water Resources (DWR)

Steve Stuart and Matt Howard provided information about stream gauge monitoring in the Yucaipa Basin. A tour was conducted with staff members from the Department of Water Resources on August 26, 2019 to discuss the potential monitoring sites.

C. Development of a Water Budget for the Yucaipa Region

Steve Stuart provided information about characterizing wet and dry periods and the criteria that would be applied to these climatic events.

Steve Stuart requested anticipated water demands in the Yucaipa Basin area by year over the next 50 year period.

D. Information Needed to Simulate Future Projects in Numerical Model.

Steve Stuart requested information for evaluating future projects in the Yucaipa Basin. The requested information included: monthly water volume; location; design parameters; and the operational plan.

E. Status Report on the Sustainable Groundwater Management Act Grant and Financial Status

Steve Stuart reviewed the project completion status.

VII. Topics for Future Meetings

- Workshop – February 26, 2020
 - Discuss potential recharge projects to be included in the groundwater model
- Unscheduled Future Topics
 - Discussion regarding groundwater dependent ecosystems – pending

VIII. Comments by the Board of Directors - None

IX. Announcements - The next meeting of the Yucaipa Sustainable Groundwater Management Agency will be a Board Meeting on Wednesday, September 25, 2019 at 10:00 a.m.

X. Adjournment - The meeting was adjourned at 11:25 a.m.

MEMORANDUM

To: Mark Iverson, WHWC
From: Steven Stuart, Dudek
Subject: Request Information for Projected Growth and Water Demands, and Proposed Project Descriptions
Date: September 16, 2019
cc: David Armstrong, SMWC; Joe Zoba, YVWD; Bob Martin, South Mountain Water Company; Bob Tincher, SBVMWD; Matt Howard, SBVMWD; Ray Casey, City of Yucaipa; Cecilia Griego, City of Redlands; Steve Horn, County of Riverside; Bob Page, County of San Bernardino; Jeff Davis, SGPWA
Attachment(s): None

In preparing to evaluate future conditions in the Yucaipa Basin, Dudek requests information on projected growth and future water demands, and proposed projects, from the member agencies of the Yucaipa GSA. This information will be included in the groundwater numerical model to evaluate future conditions in the basin and how proposed projects may achieve sustainable management of the groundwater resources in the basin. The information on projected growth and demands will be incorporated in the groundwater flow model to estimate future water budgets and assess supply vs. demand.

Dudek requests that all information requested herein be received by February 28, 2020.

Any data delivered after that date will be set aside for the 5-year update process following submittal of the Groundwater Sustainability Plan.

1. Projected Growth and Water Demand

Dudek requests the following information pertaining to projected growth and future water demands:

- Projected Growth – please provide projected population numbers on a 5-year or 10-year basis out to maximum buildout. At the least, projections should be provided for 2030 and 2070, if maximum buildout is not realized by those years. Please identify changes to land use type associated with the projected growth.
- Future water demands – please provide projected water demands on a 5-year or 10-year basis out to maximum buildout. Please identify, if possible, where in your service area the water demands will change vs. current demands. At the least, projections should be provided for 2030 and 2070, if maximum buildout is not realized by those years.
 - Please provide the methodology for calculating the future water demands. For example, will the future demands be based on current metered data? Or will it be based on a mean daily

consumption rate per capita? If possible, we'd like to request the calculation of future water demands in spreadsheet form with demands calculated on a monthly or annual basis.

2. Projects

Dudek requests the following information on proposed projects to evaluate their potential impact on future basin conditions:

- Project location – provide locations of the project boundary and identify where potential water sources (e.g., state project water pipeline) enter the project boundary. The locations should be in Lat/Long coordinates and, if possible, State Plane Coordinate system, in feet.
- Project Design – provide a schematic design and/or design specifications of the proposed project. The project design should include dimensions, in feet, and identify areas that may require a land use type change. The design should also identify the source and type of water provided to the project.
- Proposed Operation Plan – please provide information on the proposed operations of the project on a monthly or quarterly basis. This may include, for example, estimated monthly quantities of water supplied to the project and any waste or removal of water, if applicable, from the supply stream.
- Life Expectancy of the Project – The designed life expectancy of the project will be important when evaluating the long-term (e.g., 50 years) conditions in the basin. Please identify phases of the project, if applicable, during the life of the project. For example, the initial phase is planned for delivery of 12,000 AFY, followed by a second phase that will include an additional 5,000 AFY.

The information requested above pertains to the physical characteristics of a project that can be simulated in the groundwater flow numerical model. The GSA should also consider other factors to evaluate and prioritize projects. These factors may be categorized into the following general classifications: Environmental (will the project trigger CEQA/NEPA?), Administrative (is the project consistent with planning agency regulations and jurisdictional plans?), Permitting (will the project require local, state and/or federal permitting before implementation?), and Funding (what is the capital cost? Annual O&M cost? Timeline to secure funding?). Dudek will develop a GSP Project Evaluation Checklist to address these questions to evaluate and prioritize projects in the context of SGMA and maintaining sustainable management of the basin.

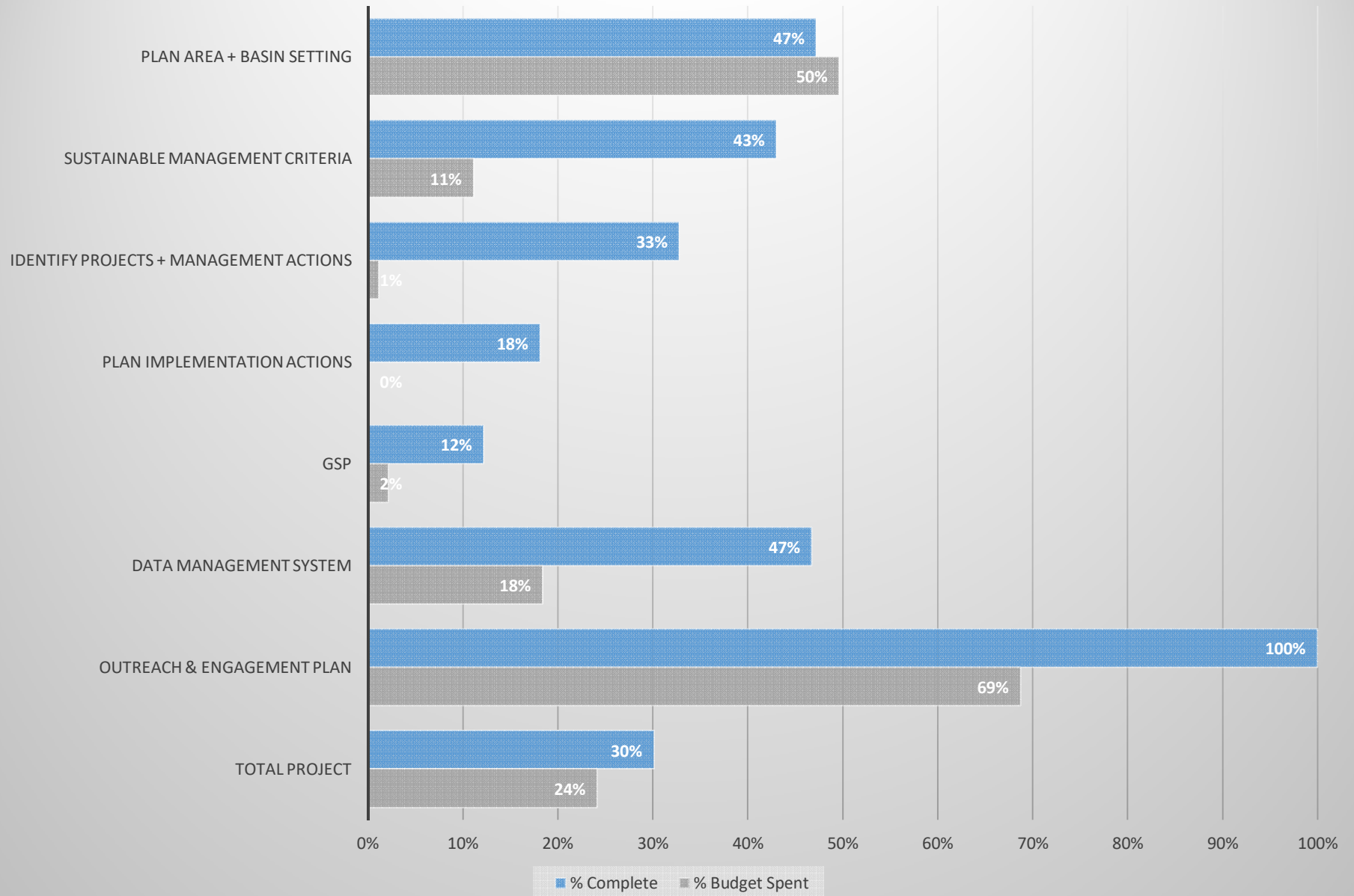
If you have any questions regarding the requested information in this letter, or wish to discuss further the evaluation of projects and projecting future demands, please do not hesitate to call me at 760-479-4128.

Sincerely,

Steven Stuart, PE
Project Manager



Yucaipa GSP Development (as of 8/30/2019)





Yucaipa SGMA

Groundwater Sustainability Plan (GSP)

Development

Yucaipa GSA Workshop
September 25, 2019

2011

Safe Yields & Capacities
(Geoscience, 2012-13)

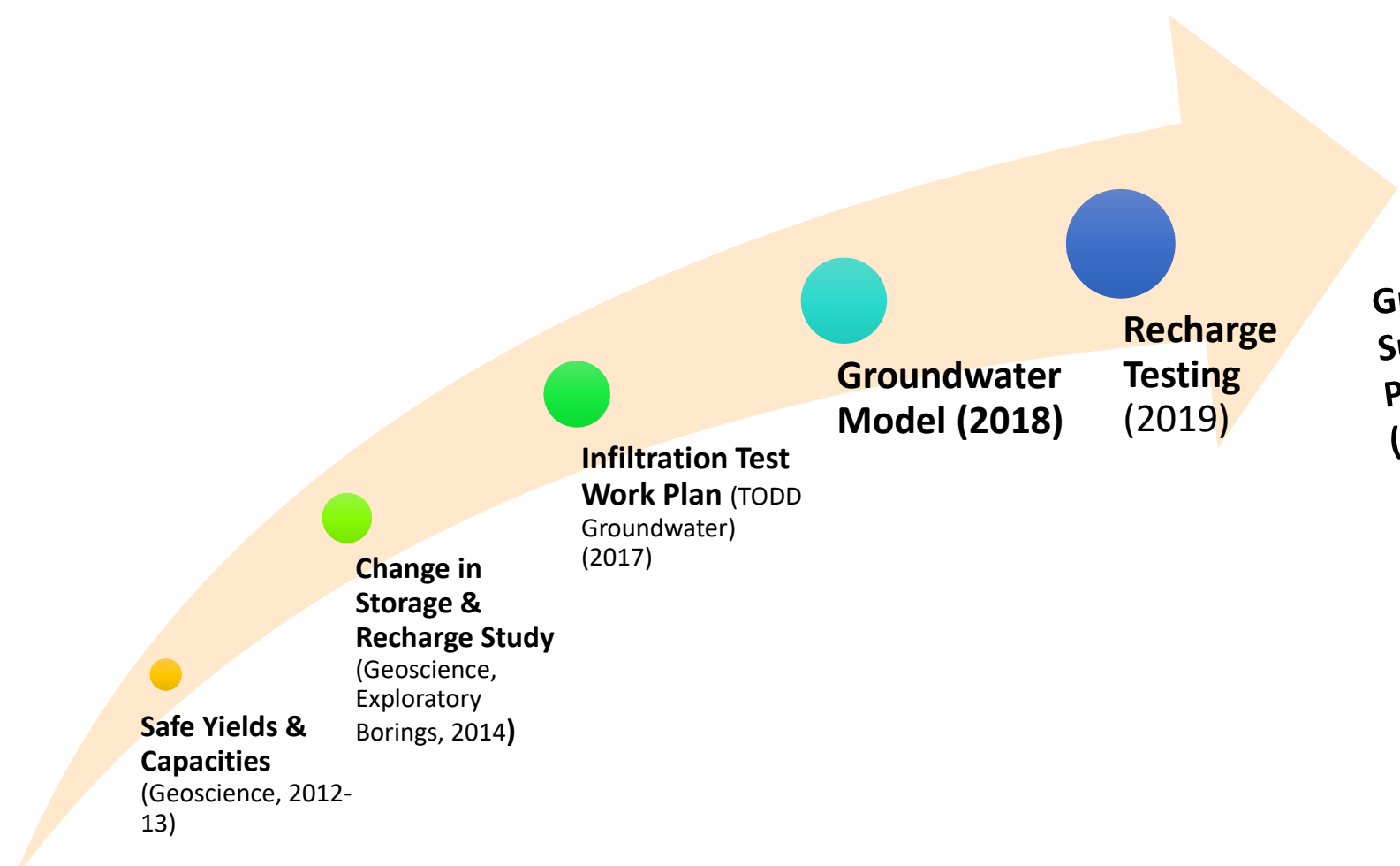
Change in Storage & Recharge Study
(Geoscience, Exploratory Borings, 2014)

Infiltration Test Work Plan (TODD Groundwater)
(2017)

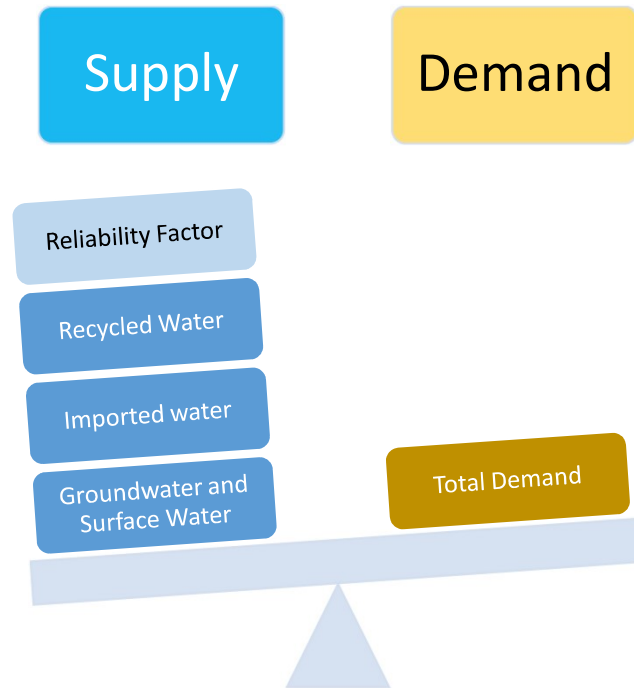
Groundwater Model (2018)

Recharge Testing (2019)

Basin Management Plan
Groundwater Sustainability Plan, GSP (Due 1/31/22)



GSP GOAL - Sustainability



GSP Requirements under SGMA

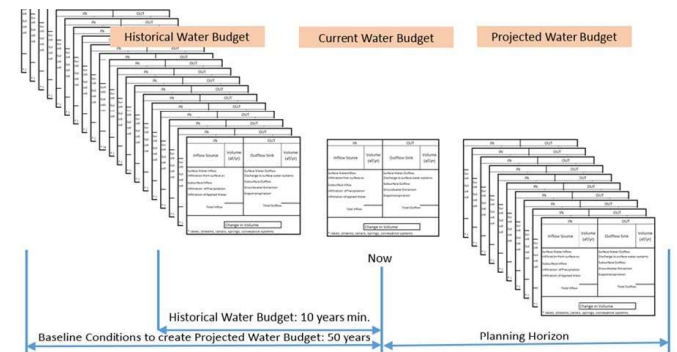
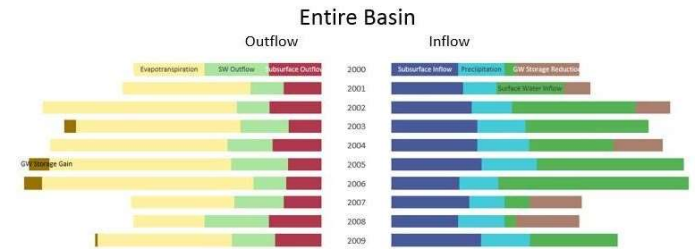
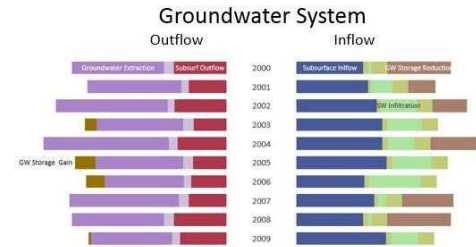
- Show that Basin is Sustainable

- Water Budget

- Past, Present and Future
 - Evaluate Future with Projected Demands + Climate Change
 - Inflows vs. Outflows = Δ in storage
 - Water supply portfolio to meet demands
 - Withdrawal of water for the long-term without causing undesirable results

- SGMA Sustainability Indicators:

- ✓ Water levels
- ✓ Storage
- ✓ Subsidence
- ✓ Water quality
- ✓ Groundwater dependent ecosystems
- ✓ Seawater intrusion



GSP Road Map

Start GSP

Data Collection, Review Models

Start: Nov 2018

Basin Area + Setting

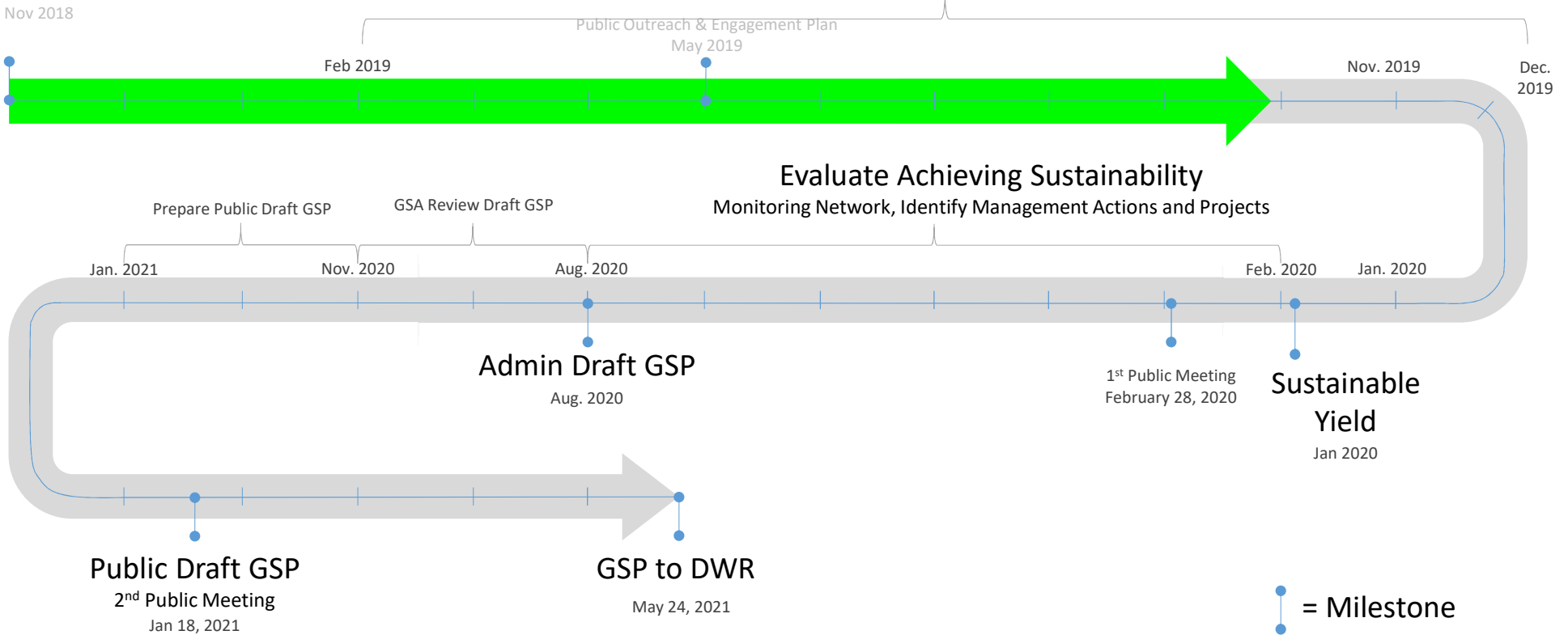
Analyze Data, 3D Conceptual Model, Historical and Current Groundwater Conditions

Basin Understanding

Monitoring Protocols, Model Uncertainty, Identify Data Gaps

Defining Sustainability

Current Balance and Future Projections – Do We Need More Supply to Achieve Sustainability?



Presentation Outline

- Defining Sustainability
 - Water Budget Analysis
 - Projected Growth and Water Demands out to 2070
- Data Collection and Management
 - DMS Demonstration
 - Draft RFP
- Grant Funding Opportunities
- Budget Update



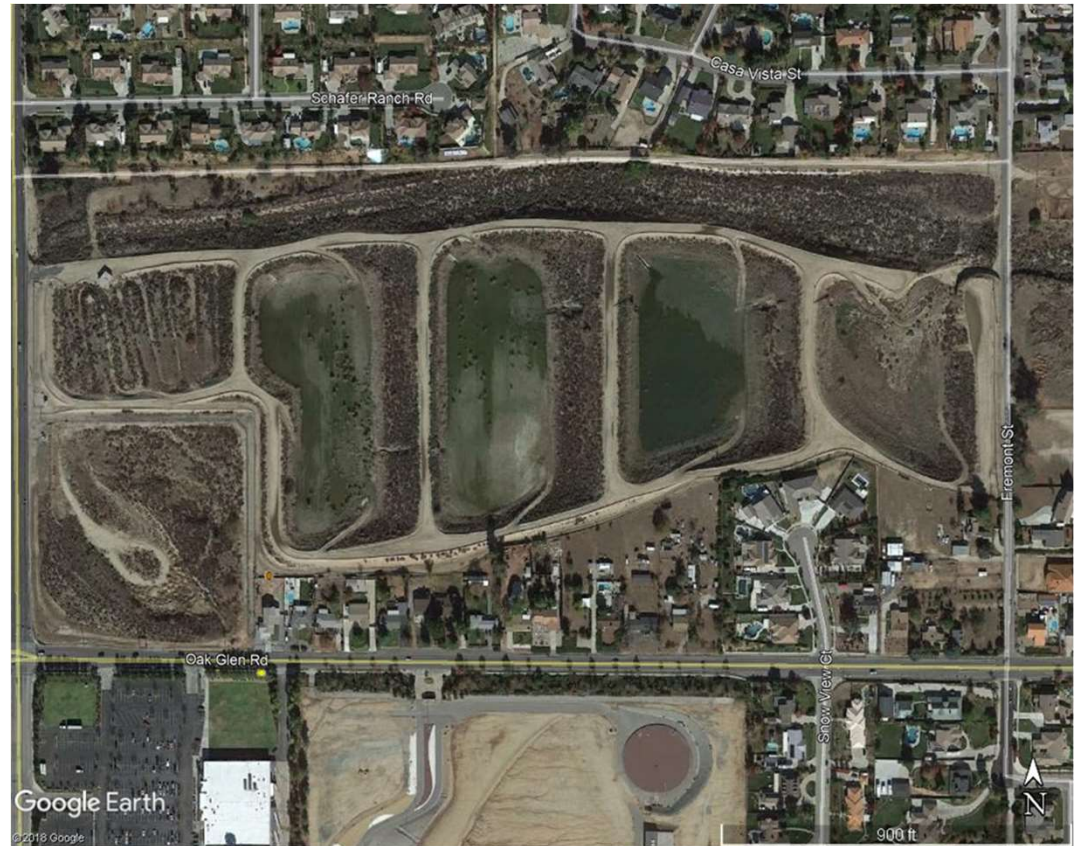
Projected Growth and Water Demand

- Projected Growth
 - Projected population on 5-year or 10-year increments
 - Out to 2030 and 2070, or maximum buildout
 - Projected Changes to Land Use
- Projected Water Demands
 - Projected water demands on 5-year or 10-year increments
 - Out to 2030 and 2070, or maximum buildout
 - Methodology for calculating projected water demands



Future Projects

- Location
- Design
- Operation Plan
- Life Expectancy
- Develop Evaluation Metric to Prioritize Projects



Data Collection and Management



Field Collection

- Collect electronically
- Download into DMS



Database Management System (DMS)

- User-friendly
- Host?

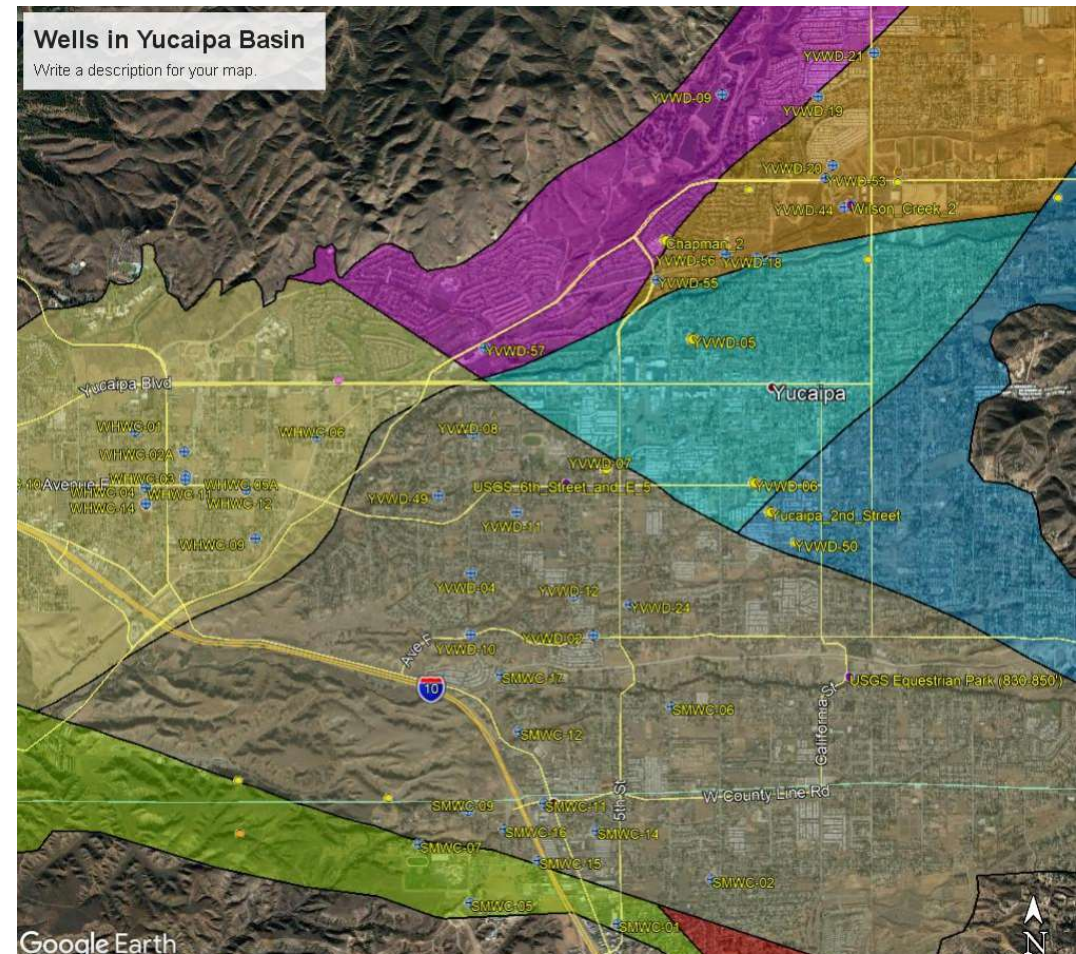


DMS Uses

- Tracking
- Flow Model
- CASGEM
- etc.

Data Collection & Management

- Establish a Monitoring Network
- Develop Monitoring Standards and Protocols for the GSA
- Data Management System



Demonstration of Borrego DMS

- <https://ims.dudek.com/borrego/groundwater/dms>

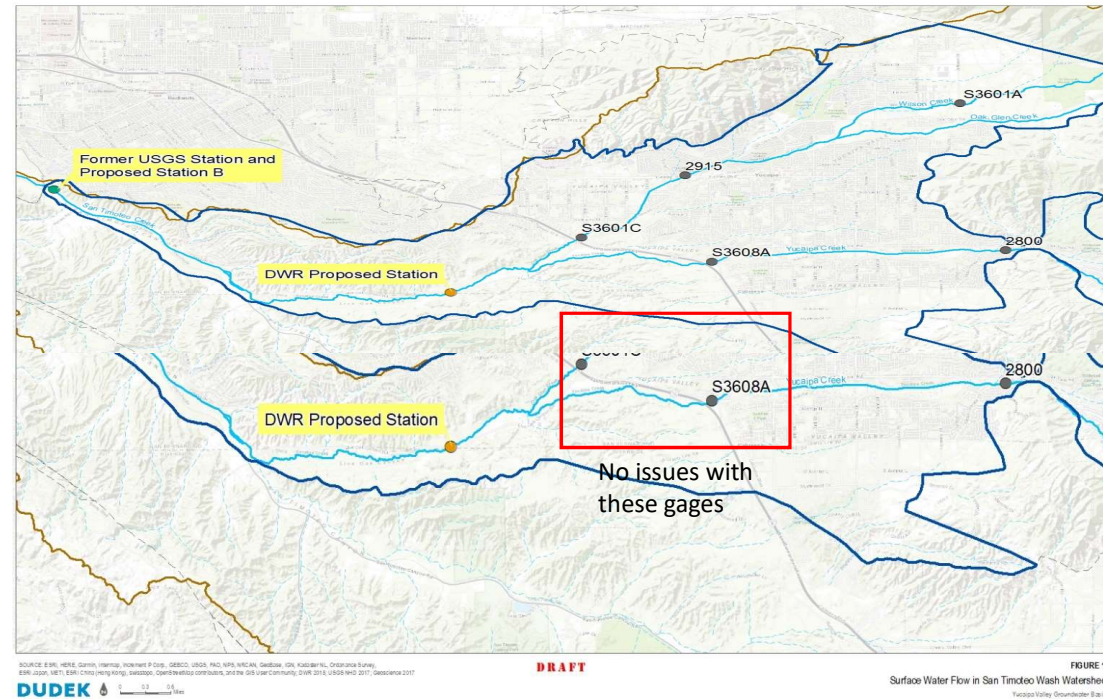


YUCAIPA SGMA

Yucaipa Sustainable Groundwater Management Agency

Proposed Stream Flow Gaging Site(s)

- DWR has funding available to install gaging stations
- DWR Proposed Station
 - Live Oak Canyon Rd Bridge
 - DWR obtaining permits with City of Redlands
- Proposed Station B Gage
 - DWR install of new station, or
 - Rehab Former USGS station



Funding Opportunities

- DWR technical assistance grant
 - Stream gaging stations
- Prop 68 SGMA Implementation Grants in 2021
 - 25% Matching Requirement
 - Assist GSAs in implementing GSP
 - Monitoring
 - Management Actions - Projects
 - Start permitting, CEQA processes soon to be in position to apply in 2021
- Timeline for Implementation Grants
 - Early 2021 - Release draft Proposal Solicitation Package
 - Recommend reviewing Draft Guidelines and potentially preparing comments
 - Mid to Late 2021 - Grant solicitation
 - Early 2022 - Award List Released
 - Recommend scoping now for a grant application



YUCAIPA SGMA

Yucaipa Sustainable Groundwater Management Agency

Next Steps

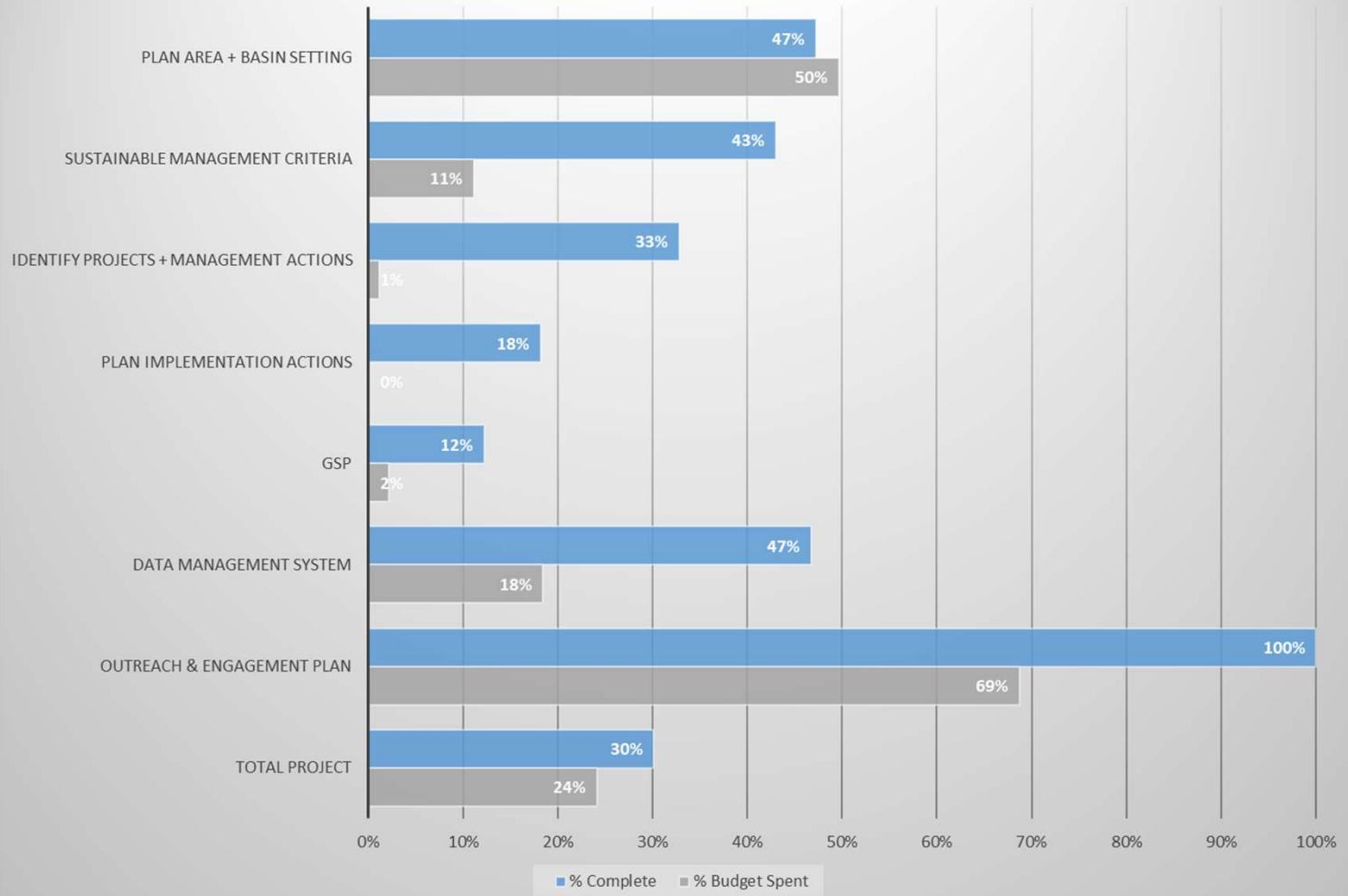
- Draft DMS RFP to GSA to review and provide comments
- Continue discussions with DWR on stream gaging installs
- Establish Monitoring Network
 - Wells, climate stations, stream flow
- Establish Monitoring Protocols
- Water Budget Analysis
 - Numerical model
- Define Sustainable Yield
- Define sustainable management criteria
 - Water levels
 - Change in storage



YUCAIPA SGMA

Yucaipa Sustainable Groundwater Management Agency

Yucaipa GSP Development (as of 8/30/2019)



Grant Status

- 3rd Quarterly Report In Progress (7/1/19- 9/30/19)
- Planning Activities 95% Complete
 - The final USGS Model Report is the last outstanding deliverable
- GSP Activities 25% Complete

