North Fork Kings
Groundwater Sustainability Agency

GROUNDWATER SUSTAINABILITY PLAN (GSP) STATUS REPORT

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Provost & Pritchard Consulting Group

BOARD OF DIRECTORS STUDY SESSION

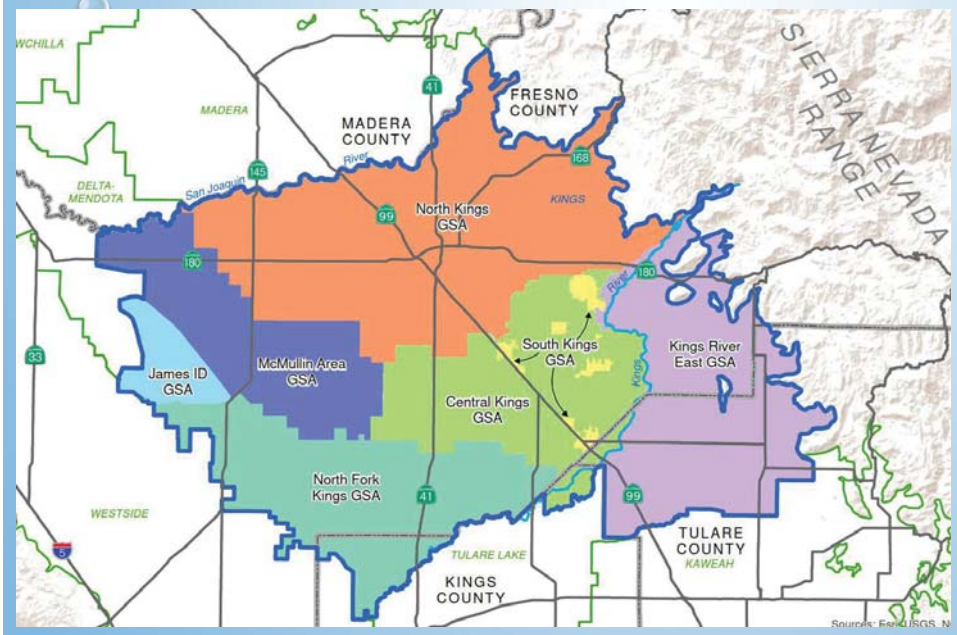
APRIL 25, 2018

RIVERDALE COMMUNITY EDUCATION CENTER BOARD ROOM

PRESENTATION OVERVIEW

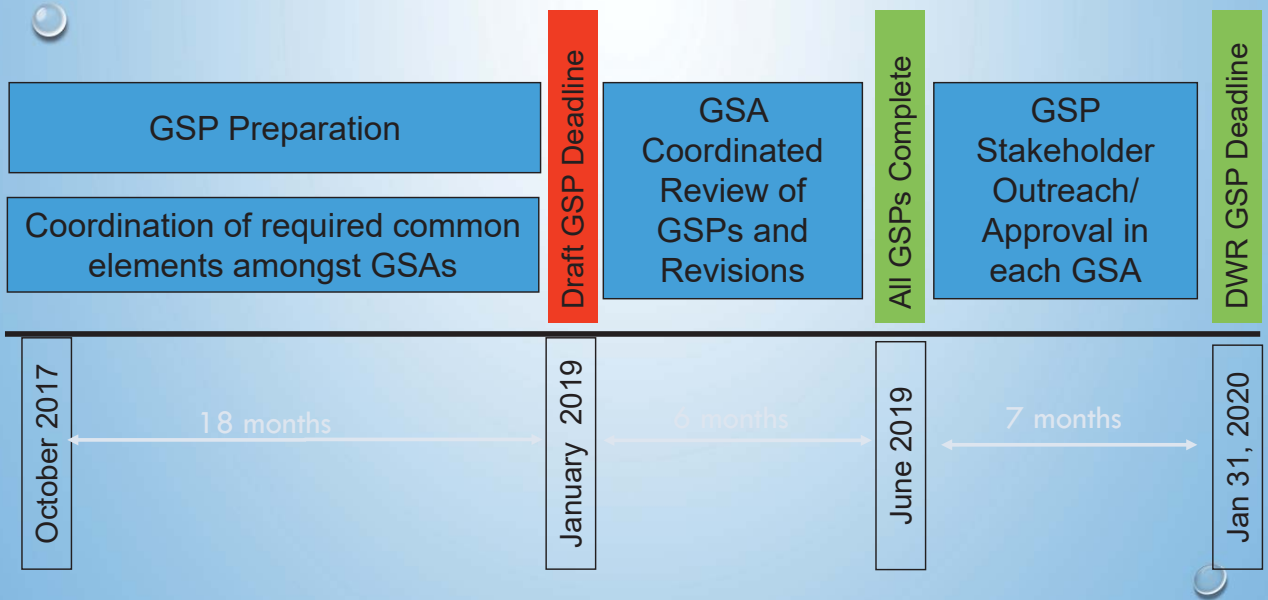
1. KINGS BASIN COORDINATED EFFORT
2. WATER BUDGET
3. GSP DEVELOPMENT UPDATE
4. MONITORING NETWORK
5. SUSTAINABLE MANAGEMENT CRITERIA
6. LAND SUBSIDENCE
7. PROPOSITION 218 ELECTION UPDATE
8. NEXT STEPS

KINGS SUB BASIN



- 7 GSAS WITHIN KINGS SUB BASIN
- EACH GSA IS PREPARING IT'S OWN GSP
- EACH GSA MUST COORDINATE WITH OTHER GSAs IN SUB BASIN ON GSP
- ENTIRE SUB BASIN MUST BE SUSTAINABLE BY 2040

The Kings Subbasin is considered "High Priority" and "Critically Overdrafted"



GSP PREPARATION TIMELINE FOR NORTH FORK KINGS GSA

KINGS COORDINATION GROUP TASK ORDERS

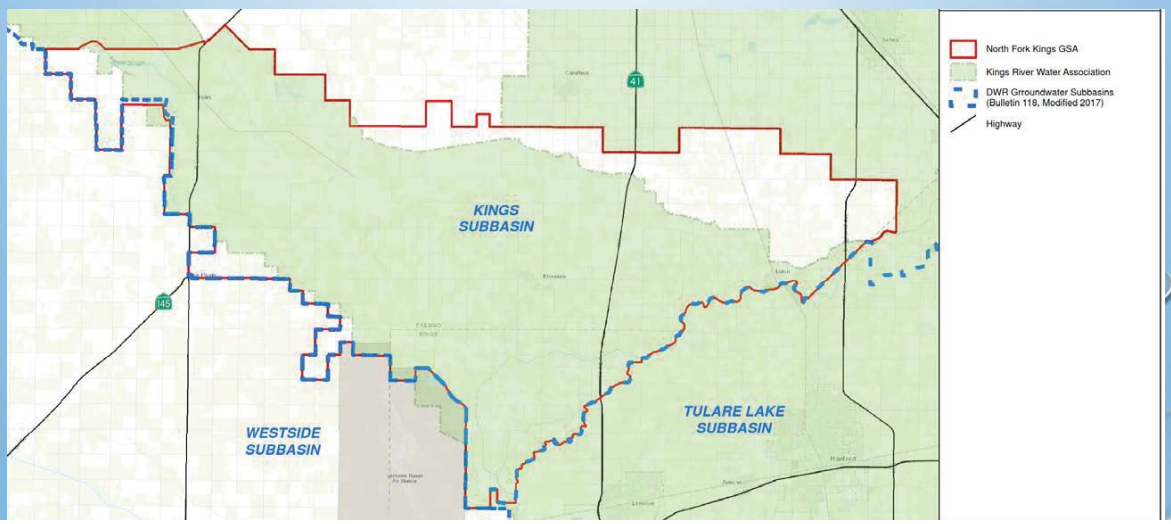
- KINGS COORDINATED EFFORT IS TRYING TO ESTIMATE CURRENT OVERDRAFT WITHIN KINGS SUB BASIN AND ASSIGN RESPONSIBILITY AMONG GSAs
  - TASK 1 - PROJECT COORDINATION AND MEETINGS
  - TASK 2 - GROUNDWATER CONDITIONS
  - TASK 3 - ESTIMATION OF GROUNDWATER STORAGE (UNCONFINED)
  - TASK 4 - GROUNDWATER FLOW ESTIMATES
  - TASK 5 - CONFINED AQUIFER BOUNDARY FLOW ESTIMATE NEW
  - TASK 6 - DATA MANAGEMENT SYSTEM NEW
  - TASK 7 - WATER BUDGET NEW

KINGS COORDINATION GROUP EFFORTS (ON-GOING AND FUTURE)

- 7 KINGS GSAs MEET MONTHLY AT FRESNO IRRIGATION DISTRICT'S OFFICE
- VARIOUS TECHNICAL MEMORANDUMS PREPARED AND ARE BEING UPDATED
- OVERDRAFT ESTIMATION FOR EACH GSA (ON-GOING, NEARING COMPLETION)
  - CHANGE IN GROUNDWATER STORAGE
  - GROUNDWATER FLOWS – INTERNAL BETWEEN GSAs AND EXTERNAL TO ADJACENT SUBBASINS
- EVALUATED KINGS RIVER SURFACE WATER DIVERSIONS INTO KINGS SUBBASIN, SELECTED WY 1998-2010 AS RECENT "TYPICAL" PERIOD
- REGIONAL WATER BUDGET (ON-GOING)
- COORDINATED DATA MANAGEMENT SYSTEM (FUTURE)
- CONSISTENCY AMONG GROUNDWATER SUSTAINABILITY PLANS (FUTURE)
- DEVELOP COORDINATION AGREEMENT (FUTURE)

WATER BUDGET

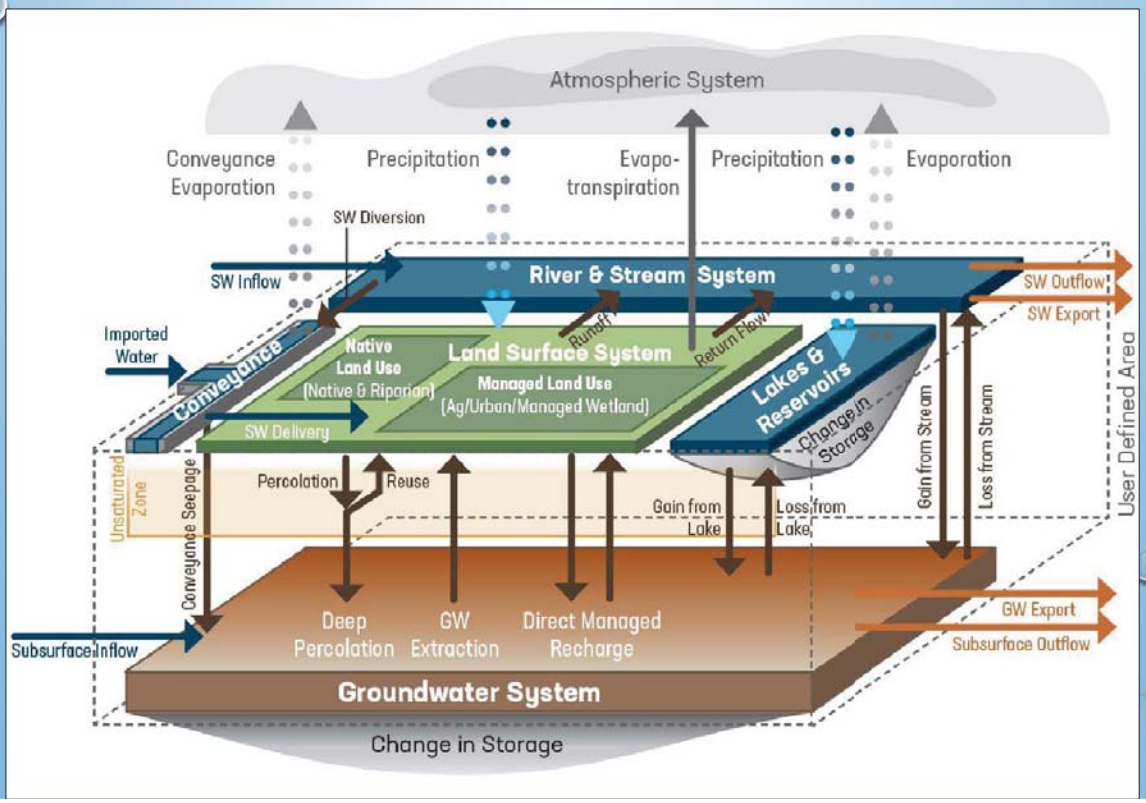
- WATER BUDGET IS REQUIRED TO BE PREPARED AS PART OF GSP
- WATER DEMAND NOT MET BY SURFACE WATER OR PRECIPITATION MUST BE MET BY GROUNDWATER PUMPING
- SURFACE WATER SUPPLY WITHIN NFKGSA ALMOST EXCLUSIVELY KINGS RIVER
- APPROXIMATELY 22% OF NFKGSA AREA IS OUTSIDE KINGS RIVER SERVICE AREA



WATER BUDGET COMPONENTS

- SUMMARIZE ALL WATER SOURCES AND USES
  - SOURCES: SURFACE WATER, PRECIPITATION, GROUNDWATER (ESTIMATE)
  - USES: IRRIGATION, MUNICIPAL, RESIDENTIAL, INDUSTRIAL
- SUMMARIZE HYDROLOGICAL INTERACTIONS
  - LAND SURFACE: GROUNDWATER INTERACTIONS
    - GROUNDWATER PUMPING, DEEP PERCOLATION, INTENTIONAL RECHARGE, RIVER/CANAL SEEPAGE
  - LAND SURFACE: ATMOSPHERE INTERACTIONS
    - PRECIPITATION, EVAPORATION, EVAPOTRANSPIRATION
- CALCULATE CHANGE IN GROUNDWATER STORAGE
  - WATER INTO GROUNDWATER SYSTEM MINUS WATER OUT OF GROUNDWATER SYSTEM

WATER BUDGET DIAGRAM



GSP DEVELOPMENT – PLAN OUTLINE

Executive Summary

1 Introduction

2 Plan Area

- 2.1 Summary of Jurisdictional Areas and Other Features - in progress
- 2.2 Water Resources Monitoring and Management Programs
- 2.3 Relation to General Plans
- 2.4 Additional GSP Components
- 2.5 Notice and Communication

3 Basin Setting

- 3.1 Hydrogeologic Conceptual Model - in progress
- 3.2 Current and Historical Groundwater Conditions - in progress
- 3.3 Water Budget Information - in progress
- 3.4 Management Areas

4 Sustainable Management Criteria

- 4.1 Sustainability Goal
- 4.2 Undesirable Results
- 4.3 Minimum Thresholds
- 4.4 Measureable Objectives

5 Monitoring Network - in progress

6 Projects and Management Actions to Achieve Sustainability

7 Plan Implementation

References and Technical Studies

MONITORING TOPICS

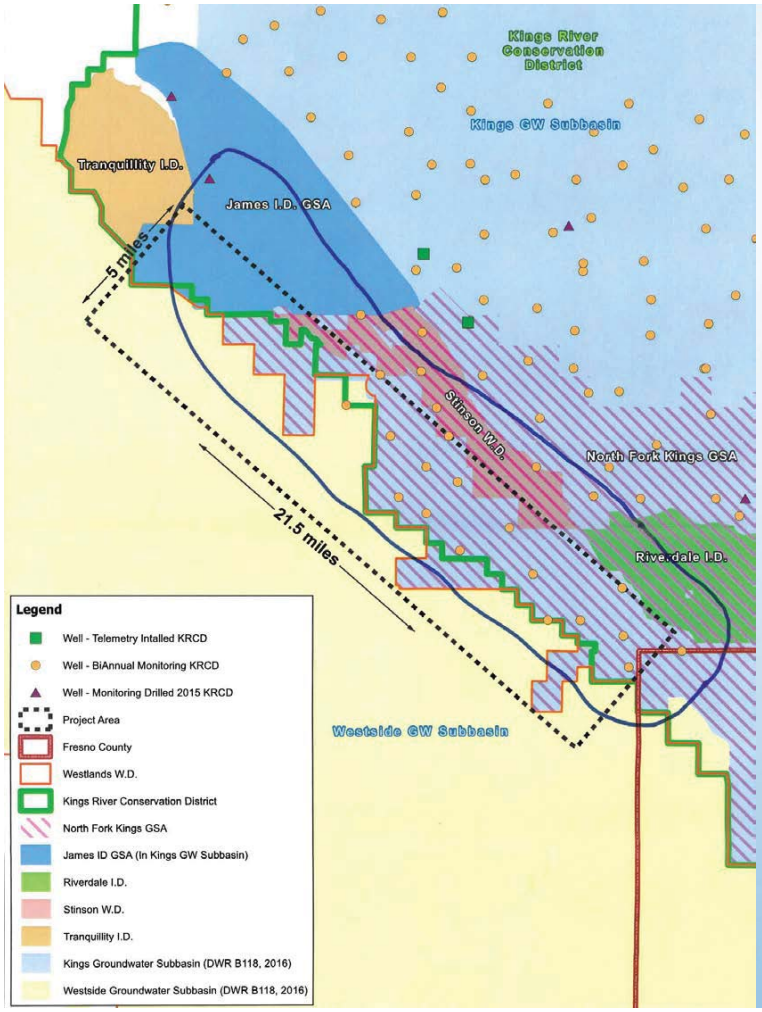
- DESCRIPTION OF MONITORING NETWORK
- MONITORING PROTOCOLS – STANDARDS AND COLLECTION METHODS
- REPRESENTATIVE MONITORING – FREQUENCY & DENSITY
- ASSESSMENT AND IMPROVEMENT OF MONITORING NETWORK – DATA GAPS
- REPORTING MONITORING DATA TO DWR – ANNUAL REPORT
- MANAGEMENT AREAS MAY DEFINE DIFFERENT MINIMUM THRESHOLDS AND BE OPERATED TO DIFFERENT MEASURABLE OBJECTIVES
- UNDESIRABLE RESULTS MUST BE DEFINED CONSISTENTLY THROUGHOUT THE SUBBASIN

DENSITY OF GROUNDWATER LEVEL NETWORK

- WELL DENSITY TO BE BASED ON '*PROFESSIONAL JUDGEMENT*'
- HOPKINS (1984) RECOMMENDED MINIMUM 1 WELL/25 SQUARE MILES FOR HIGH WATER USE AQUIFERS
- DESIRABLE TO SELECT 2 -3 WELLS/TOWNSHIP = 1 WELL/18-12 SQUARE MILES
- MAY NEED MORE WELLS IN SOME AREAS BECAUSE OF VARIABILITY
- REPRESENTATIVE WELL DENSITY MAY NOT BE MET IN SOME TOWNSHIPS – BECOMES A DATA GAP

MONITOR WELL INFORMATION REQUIREMENTS

- ADEQUATE MONITORING REQUIRES KNOWLEDGE OF WELL DEPTH AND PERFORATED INTERVAL IN WELLS – NEED TO KNOW WHAT AQUIFER WELL IS PUMPING FROM
- IN SOME AREAS THERE IS LIMITED WELL INFORMATION
- EFFORT UNDERWAY TO OBTAIN AND MATCH UP WELL COMPLETION REPORTS
- IF UNABLE TO DETERMINE ALL INFORMATION FOR MONITOR WELL NETWORK BY GSP SUBMITTAL, THEN IDENTIFY DATA GAP AND COMMIT TO FOLLOWING BY 2025:
  - VIDEO WELL; OR
  - USE DIFFERENT WELL/DEDICATED MONITORING WELL
- MAINTAIN OTHER WELLS CURRENTLY BEING MEASURED – STILL USEFUL



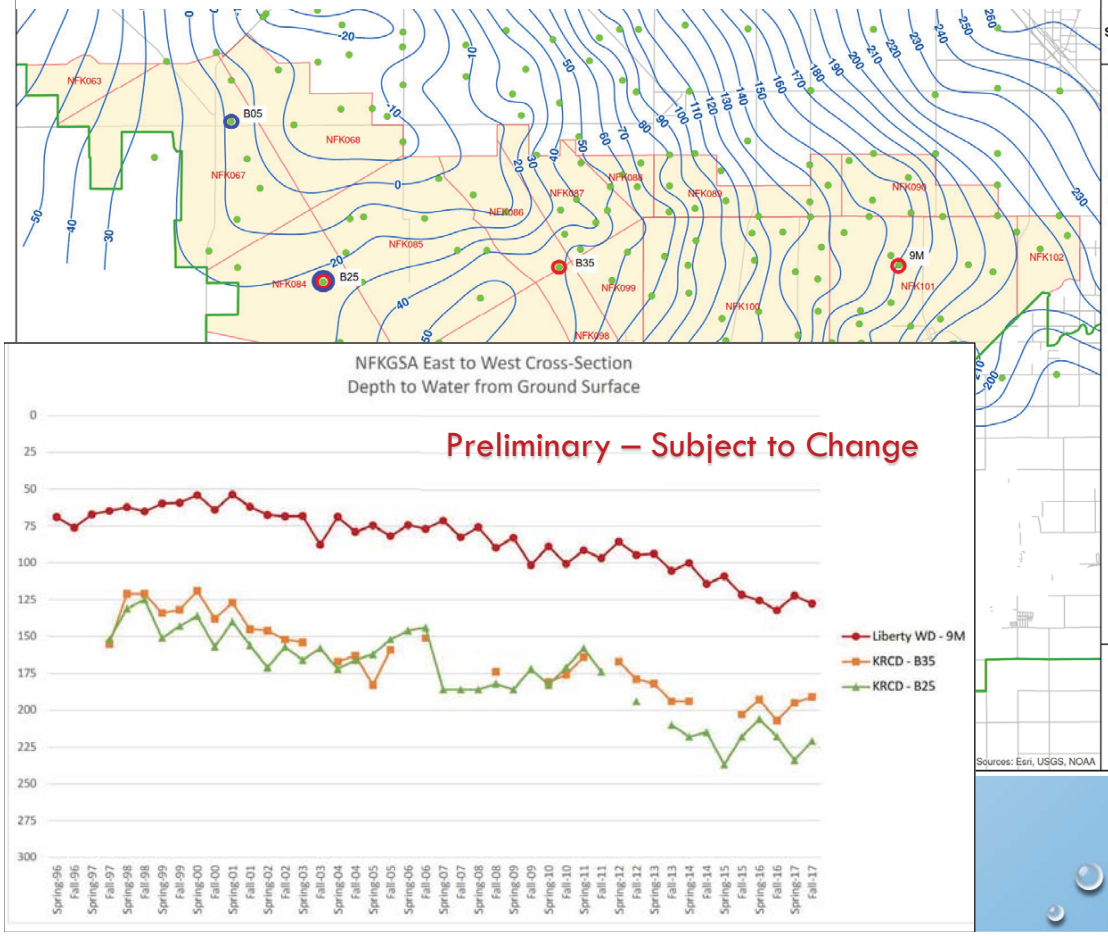
MONITOR WELLS BEING INSTALLED

Fresno County obtained a grant for installation of monitoring wells

Four (4) double completion monitor wells are currently being installed along the border of North Fork Kings GSA and Westside (Westlands) GSA

Double completion wells monitor above and below Corcoran Clay

NFKGSA GROUNDWATER HYDROGRAPHS – EAST TO WEST



Kings Subbasin Coordinated Effort

North Fork Kings GSA

Spring 2011 - Water Level Elevations (feet above mean sea level)

Legend

- Specific Yield Units
- Groundwater Subbasins (DWR 2016)
- Well Used in Analysis

Water Level Contours

- Line of Equal Elevation (10ft interval)
- East-West cross-section hydrographs
- South-North cross-section hydrographs

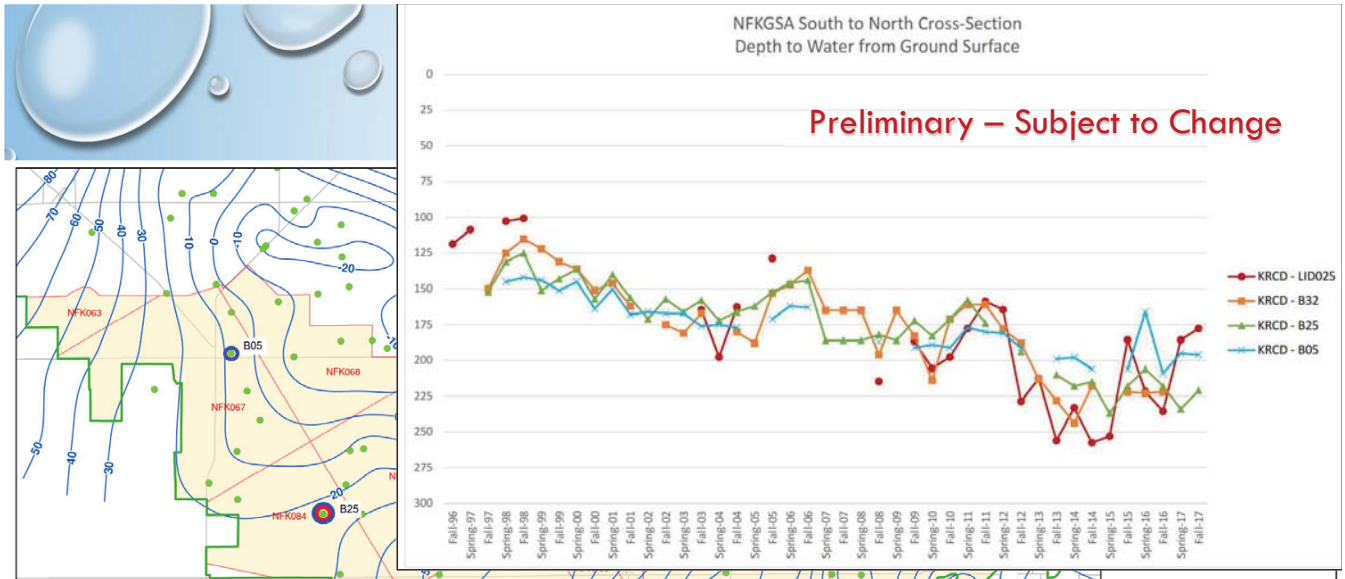
DRAFT

KDSA Est. 1972

PROVOST & PRITCHARD CONSULTING GROUP EST. 1968 An Employee Owned Company

0 1 2 Miles

Sources: Esri, USGS, NOAA



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0 1 2 Miles

NFKGSA GROUNDWATER HYDROGRAPHS – SOUTH TO NORTH

SUSTAINABLE MANAGEMENT CRITERIA

- SUSTAINABILITY INDICATORS

- SIGNIFICANT & UNREASONABLE – DEFINED USING THE FOLLOWING:

Likely addressed in this order

- Minimum Thresholds
- Undesirable Results
- Measurable Objectives
- Sustainability Goal

Must be agreed to by, and consistent in the GSPs of all GSAs within basin

SUSTAINABILITY INDICATORS

This is what is monitored

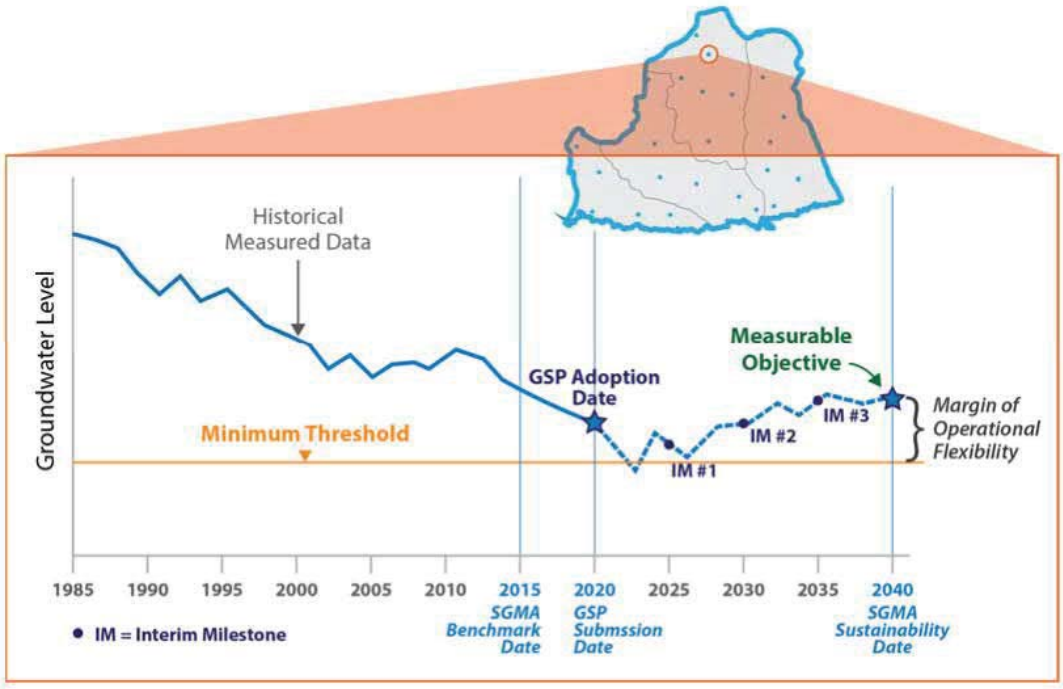
All Undesirable Results Based on Exceeding Minimum Threshold

Sustainability Indicators	Lowering GW Levels	Reduction of Storage	Seawater Intrusion	Degraded Quality	Land Subsidence	Surface Water Depletion
Metric(s) Defined in GSP Regulations	• Groundwater Elevation	• Total Volume	• Chloride concentration isocontour	• Migration of Plumes • Number of supply wells • Volume • Location of isocontour	• Rate and Extent of Land Subsidence	• Volume or rate of surface water depletion
Undesirable Result *(Significant & Unreasonable)*	Chronic Lowering indicating significant & unreasonable depletion	Reduction of GW Storage	Seawater Intrusion	Degraded Water Quality, Migration of Contaminati on Plumes	Subsidence that interferes with surface land uses	Depletions that impact beneficial uses of surface water

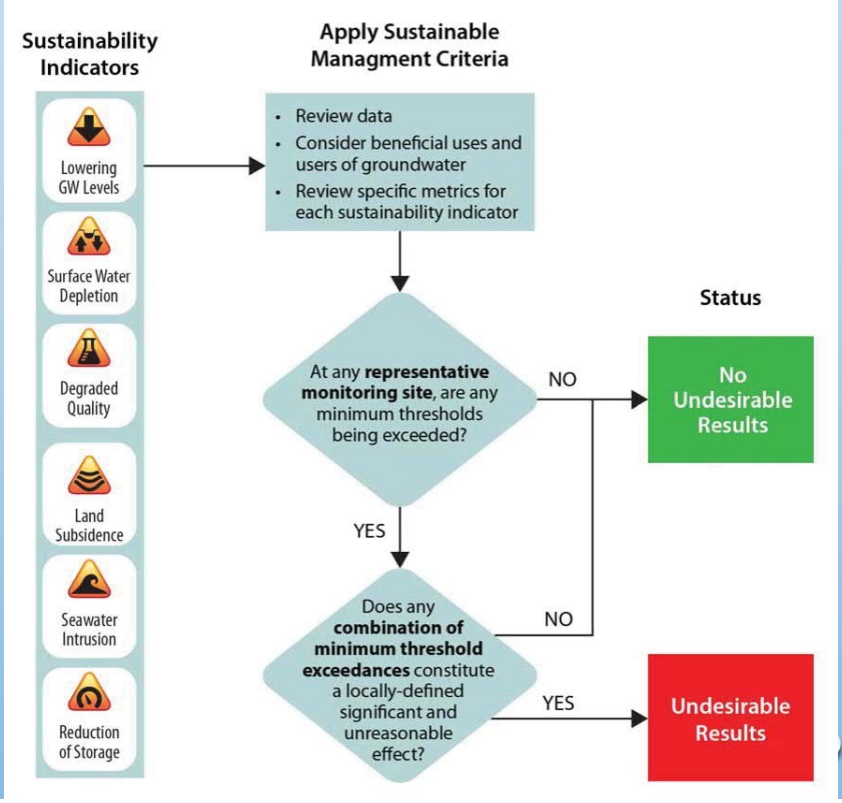
MINIMUM THRESHOLDS

- NEED TO CONSIDER ALL RELEVANT SUSTAINABILITY INDICATORS WHEN ESTABLISHING MINIMUM THRESHOLDS
- MUST STATE HOW EACH MINIMUM THRESHOLD:
  - WILL AVOID UNDESIRABLE RESULTS IN THE BASIN
  - WILL AVOID CAUSING UNDESIRABLE RESULTS IN ADJACENT BASINS
  - MAY AFFECT BENEFICIAL USE OF GROUNDWATER
  - DIFFERS FROM OTHER STATE, FEDERAL OR LOCAL REGULATORY STANDARDS
  - WILL BE MEASURED CONSISTENT WITH THE MONITORING NETWORK

MINIMUM THRESHOLDS, INTERIM MILESTONES AND MEASURABLE OBJECTIVES

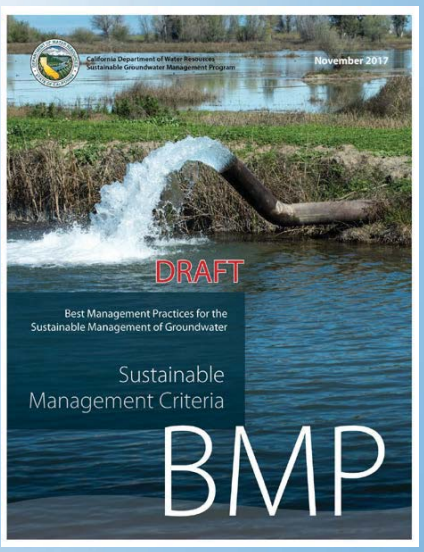


RELATIONSHIP BETWEEN SUSTAINABILITY INDICATORS AND UNDESIRABLE RESULTS



SUSTAINABLE CRITERIA BMP

- BASINS MAY EXPERIENCE UNDESIRABLE RESULTS WITHIN THE 20-YEAR PERIOD FROM 2020 TO 2040, BUT MUST STABILIZE GROUNDWATER LEVELS BY 2040



EXAMPLE

- GROUNDWATER LEVEL DECLINE OF 2 FT/YEAR DEFINED AS AN 'UNDESIRABLE RESULT'
- GROUNDWATER LEVELS FALL 3 FT/YEAR IN DROUGHTS, OK AS LONG AS WATER LEVELS RECOVER
- MINIMUM THRESHOLD EXCEEDED IN YEAR 10 BEFORE PROJECTS ARE COMPLETED
- MINIMUM THRESHOLD NOT EXCEEDED AFTER 2040 WHEN PROJECTS ARE COMPLETED AND GROUNDWATER LEVELS STABILIZED

SUSTAINABLE MANAGEMENT BMP – 2015 BASELINE

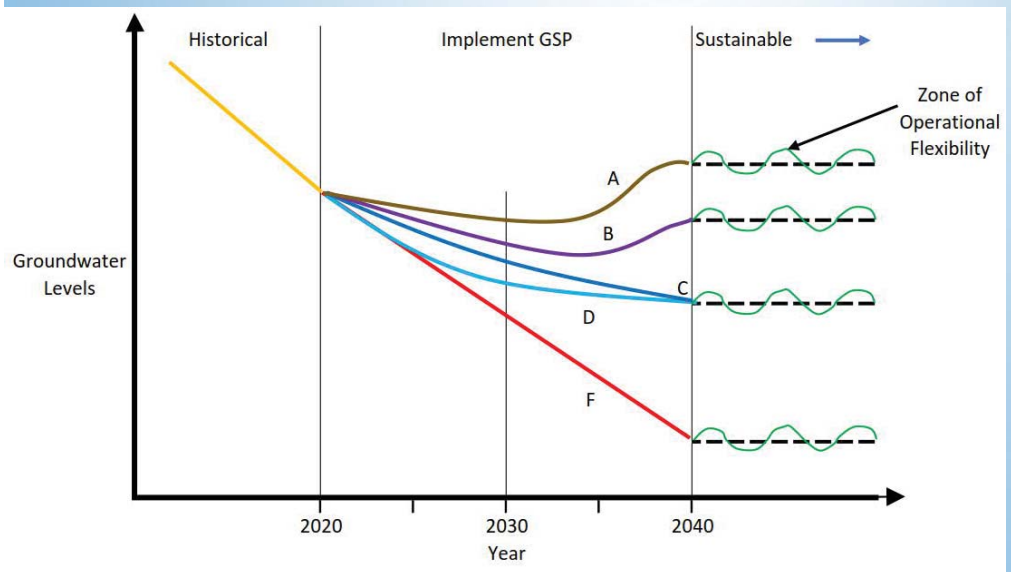
- *"IF THE EVALUATION INDICATES THAT AN UNDESIRABLE RESULT OCCURRED PRIOR TO JANUARY 1, 2015, THE GSA MUST SET MEASURABLE OBJECTIVES TO EITHER MAINTAIN OR IMPROVE UPON THE CONDITIONS THAT WERE OCCURRING IN 2015. THE GSA MUST PLAN A PATHWAY, INDICATED BY APPROPRIATE INTERIM MILESTONES, TO REACH AND MAINTAIN THE 2015 CONDITIONS WITHIN THE 20-YEAR IMPLEMENTATION TIMELINE."* (SUSTAINABLE MANAGEMENT CRITERIA BMP)
- REQUIRES CAREFUL SELECTION OF "UNDESIRABLE RESULTS"
- **NOT SURE IF THIS IS CONSISTENT WITH WATER CODE; PROVIDED WRITTEN COMMENTS TO DWR**

SUSTAINABILITY & SUSTAINABLE YIELD

- *"SGMA DOES NOT INCORPORATE SUSTAINABLE YIELD ESTIMATES DIRECTLY INTO SUSTAINABLE MANAGEMENT CRITERIA. BASIN-WIDE PUMPING WITHIN THE SUSTAINABLE YIELD ESTIMATE IS NEITHER A MEASURE OF, NOR PROOF OF, SUSTAINABILITY. SUSTAINABILITY UNDER SGMA IS ONLY DEMONSTRATED BY AVOIDING UNDESIRABLE RESULTS FOR THE SIX SUSTAINABILITY INDICATORS."*

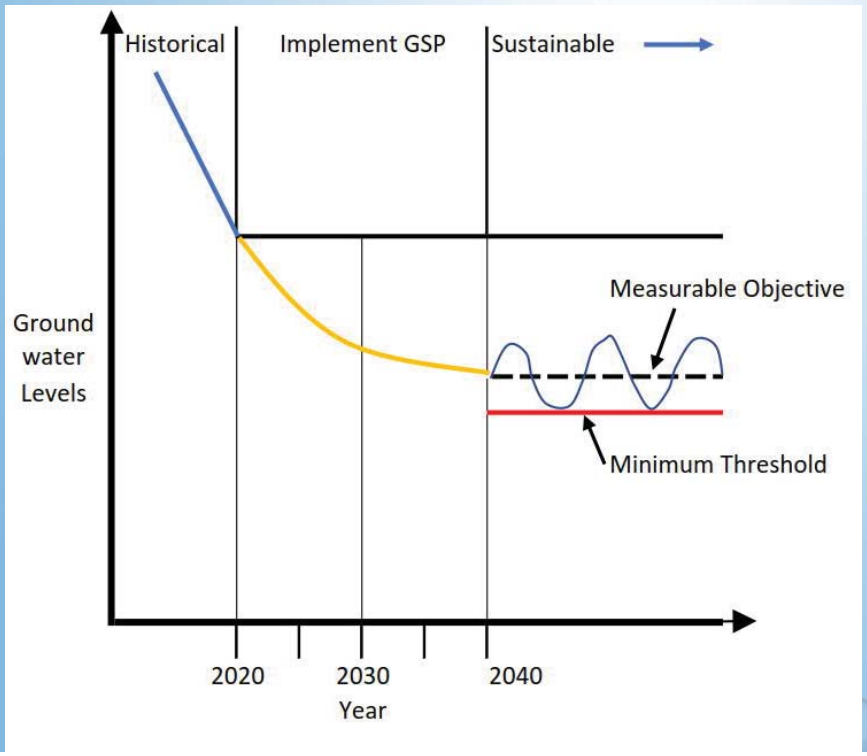
- DWR CARES ABOUT RESULTS OF PUMPAGE, NOT NECESSARILY AMOUNT OF PUMPAGE
- WILL NEED TO MONITOR PUMPAGE AND SUSTAINABILITY CRITERIA
- SUSTAINABLE YIELD WILL BE ESTIMATED TO SATISFY SUSTAINABILITY CRITERIA
- SUSTAINABLE YIELD MAY NEED TO BE MODIFIED IN FUTURE (5-YEAR INTERVALS)
  - ONLY AN ESTIMATE; SOME UNCERTAINTIES
  - CHANGES OVER TIME

PATHS TO SUSTAINABLE GROUNDWATER LEVELS

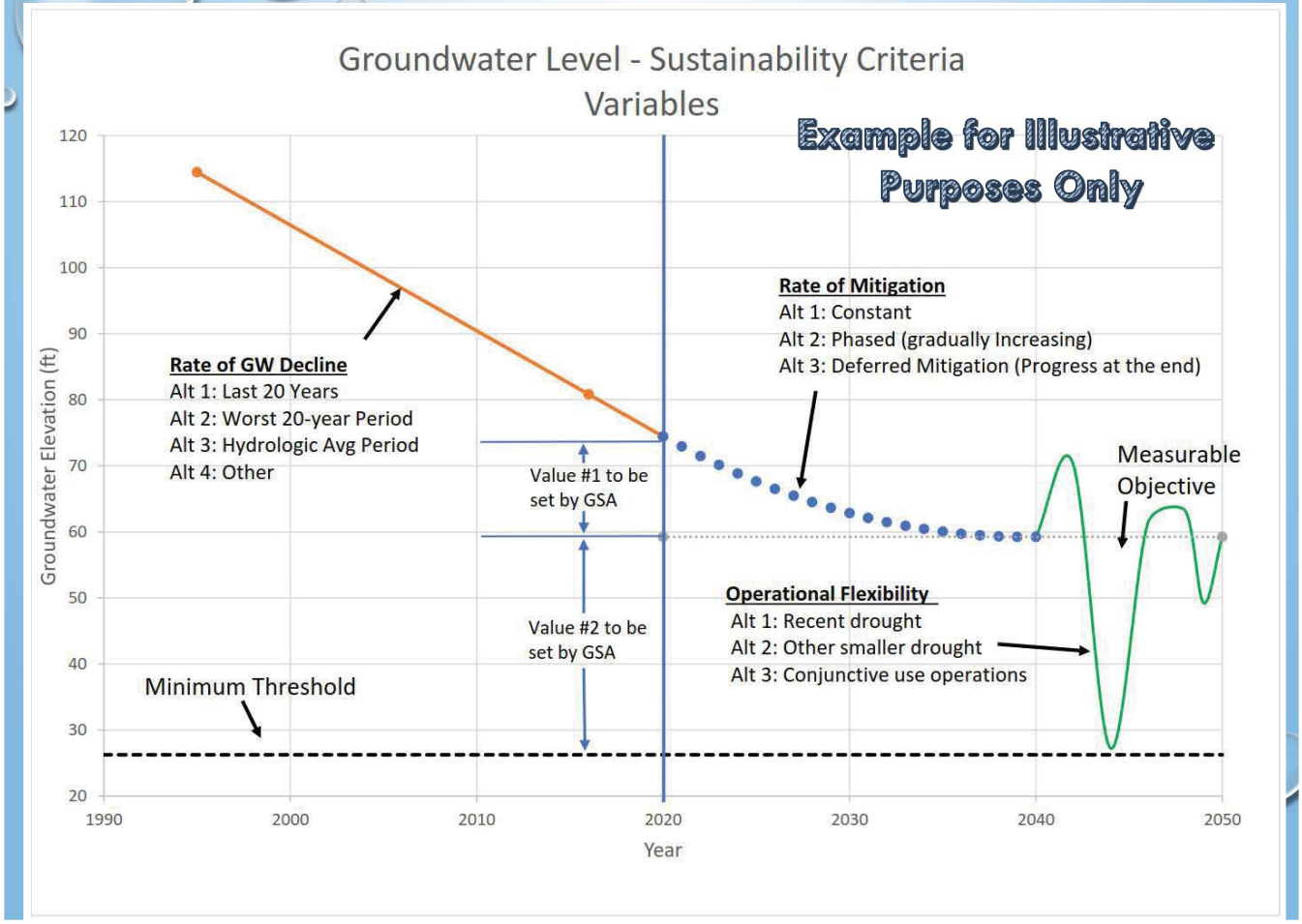


- A & B: IS RECOVERY REALISTIC GOAL?
- C & D: RECOMMENDED
- F: DWR WILL NOT LIKELY APPROVE

MEASURABLE OBJECTIVES & MINIMUM THRESHOLDS

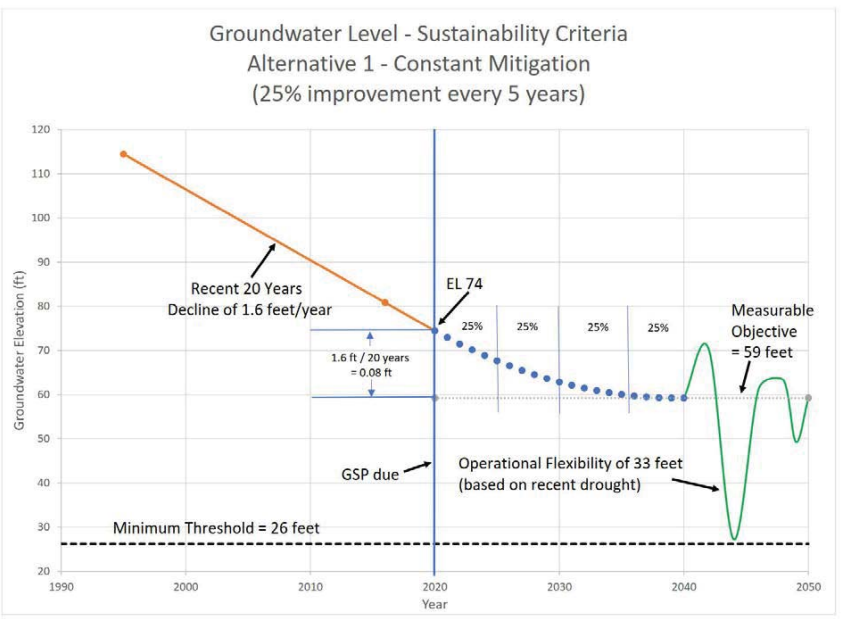


- Measurable Objective: Must maintain this level, on average, over long-term.
- Minimum threshold: Lowest level allowed; based on droughts, conjunctive use, etc.



Example for Illustrative Purposes Only

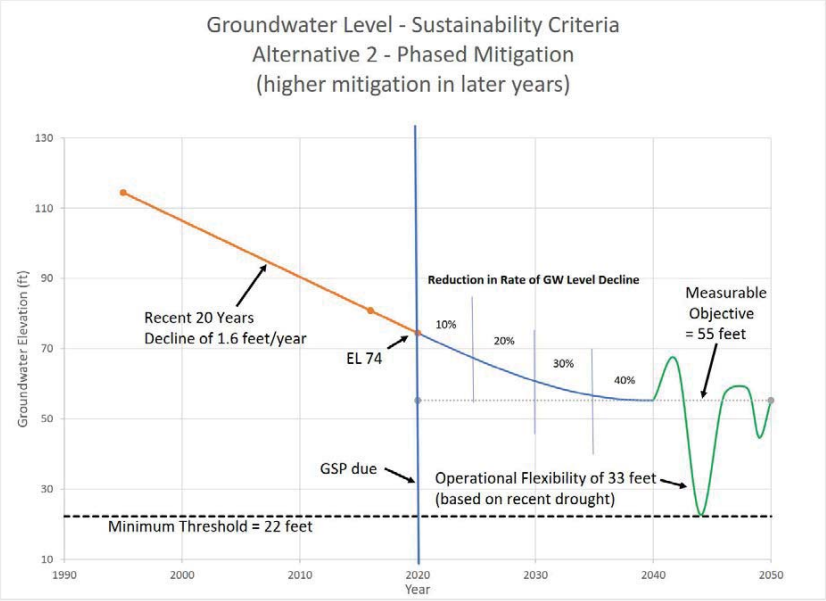
ALTERNATIVE C – CONSTANT MITIGATION



- CONSTANT MITIGATION LIKELY ACCEPTED BY DWR
- 25% IMPROVEMENT EVERY 5 YEARS
- CONSTANT OVERDRAFT MITIGATION MAY NOT BE PRACTICAL; INITIAL PROGRESS MAY TAKE SEVERAL YEARS

Example for Illustrative Purposes Only

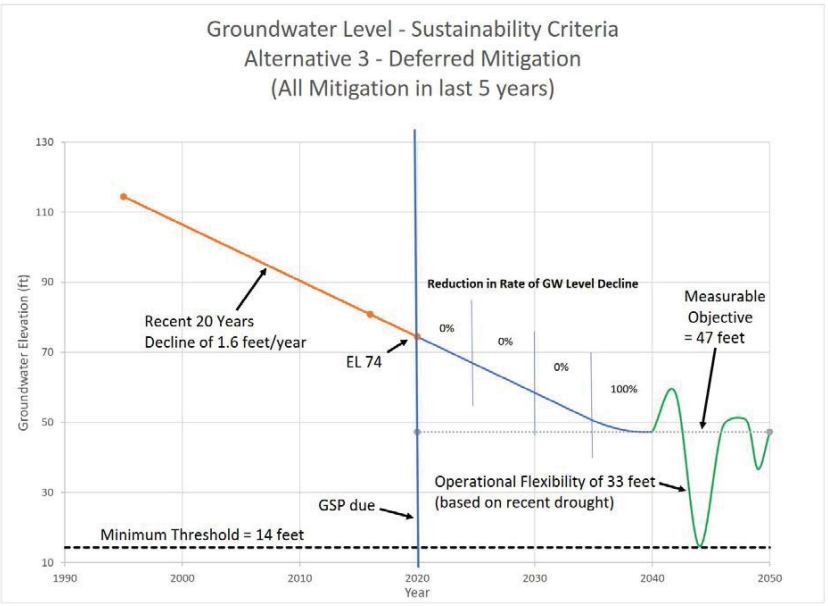
ALTERNATIVE D – PHASED MITIGATION



- MAY BE MOST PRACTICAL, REALISTIC APPROACH
- HIGHER MITIGATION IN LATER YEARS
- PHASED MITIGATION NEEDED DUE TO POSSIBLE EARLY DELAYS IN BUILDING PROJECTS (FUNDING, PERMITTING, DESIGN) AND AVAILABILITY OF FLOOD WATER FOR RECHARGE

Example for Illustrative Purposes Only

ALTERNATIVE F – DEFERRED MITIGATION



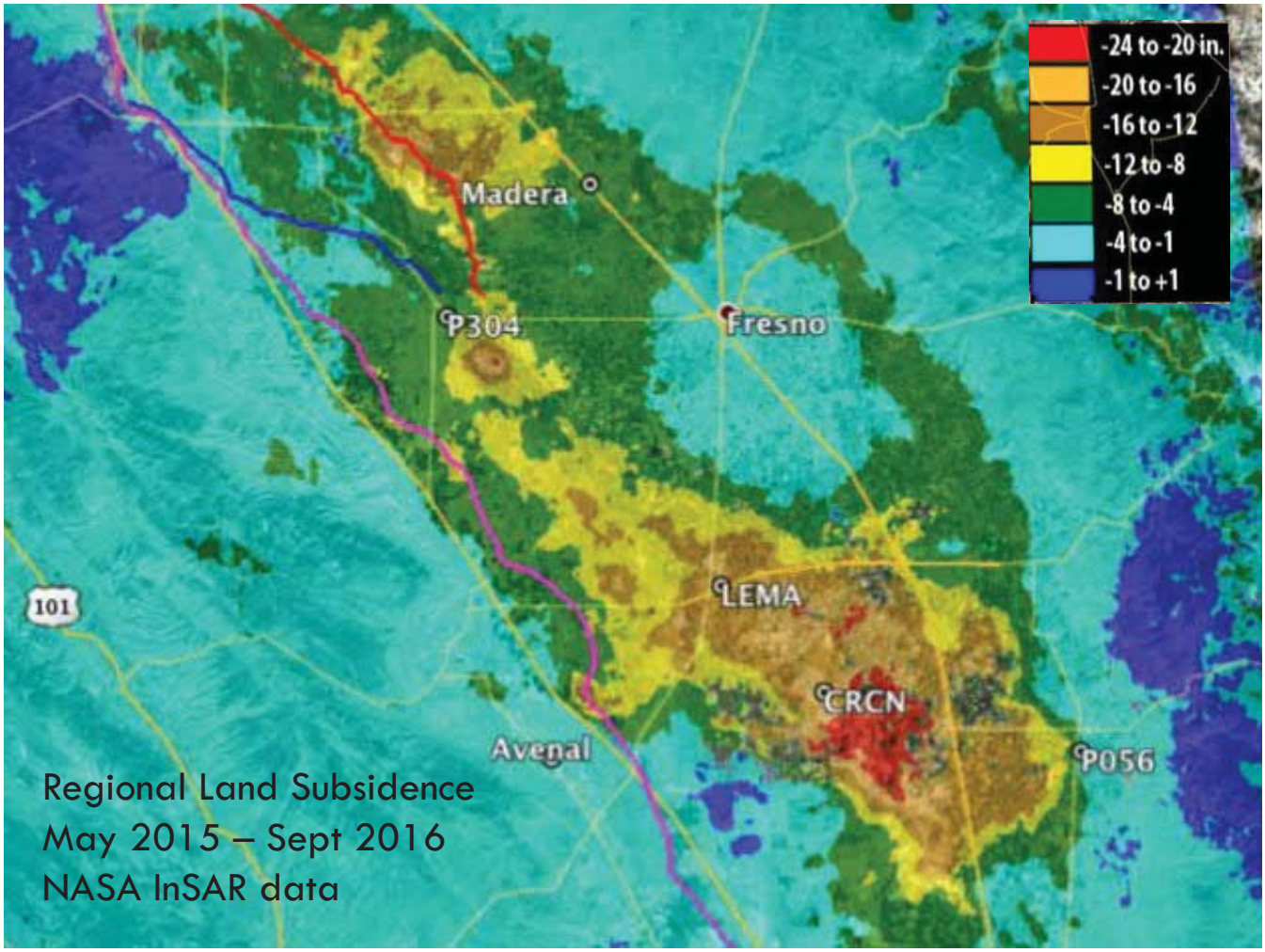
- ALL MITIGATION IN LAST 5 YRS
- NOT LIKELY APPROVED BY DWR
- DWR WANTS INCREMENTAL PROGRESS EVERY 5 YEARS
- MAY NOT HAVE ANY FLOOD WATER DURING LAST 5 YEAR PERIOD FOR RECHARGE

FUTURE WORK

- DETERMINE METHODOLOGY (ENTIRE KINGS BASIN MUST BE CONSISTENT)
  - DETERMINE RANGE OF YEARS FOR INITIAL CONDITIONS
  - DETERMINE RATE OF MITIGATION
  - DETERMINE BASIS FOR OPERATIONAL FLEXIBILITY
- DETERMINE EVALUATION AREAS (AGENCY BOUNDARIES, SUB-AREAS, ETC.)
- CRITERIA FOR AN 'UNDESIRABLE RESULTS' – MEASURABLE OBJECTIVES AND MINIMUM THRESHOLDS
  - HOW MANY WELLS BELOW THE MINIMUM THRESHOLD IS UNACCEPTABLE

LAND SUBSIDENCE

- SUBSIDENCE APPEARS TO BE AN ISSUE IN WESTERN PORTION OF GSA AND MUST BE CONSIDERED IN GSP
- KRCD IS MONITORING SPECIFIC SITES
- DWR AND USBR HAS BEEN ASSESSING REGIONAL SUBSIDENCE UTILIZING SATELLITE DATA



PROPOSITION 218 ELECTION UPDATE

- BALLOTS WERE MAILED MARCH 16TH
- PUBLIC HEARING AND TABULATION OF BALLOTS MAY 9TH
- ASSESSMENT ROLL TO BE SENT TO FRESNO AND KINGS COUNTIES IN JULY/AUGUST FOR INCLUSION IN FISCAL YEAR 2018/19 COUNTY TAXES

NEXT STEPS

- NEED TO BEGIN WORKING ON PROJECT DEVELOPMENT AND/OR MANAGEMENT ACTIONS TO ACHIEVE SUSTAINABILITY
- NEED TO BEGIN ESTABLISHING MINIMUM THRESHOLDS AND MEASURABLE OBJECTIVES
- DIVISION GROUPS MAY WANT TO MEET REGARDING LOCAL CONDITIONS
- ESTABLISH TECHNICAL ADVISORY COMMITTEE

QUESTIONS?

EXTRA SLIDES

KINGS COORDINATION TECHNICAL MEMORANDUMS

- TM1 - BASE OF UNCONFINED AQUIFER
- TM2 - SPECIFIC YIELD VALUES
- TM3 - HYDROLOGIC BASE PERIOD DETERMINATION
- TM4 - STORAGE CHANGE ESTIMATION (UNCONFINED AQUIFER)
- TM5 - BOUNDARY FLOW ESTIMATED (UNCONFINED AQUIFER)
- TM6 - DEMAND AND GROUNDWATER USE ESTIMATION
- TM7 - RESPONSIBILITY ALTERNATIVES EVALUATION

GSP DEVELOPMENT UPDATE

- PLAN AREA CHAPTER
  - PLAN PARTICIPANTS
  - LAND USE
  - WELL DENSITY AND CHARACTERISTICS
  - IMPACTS TO OPERATIONAL FLEXIBILITY

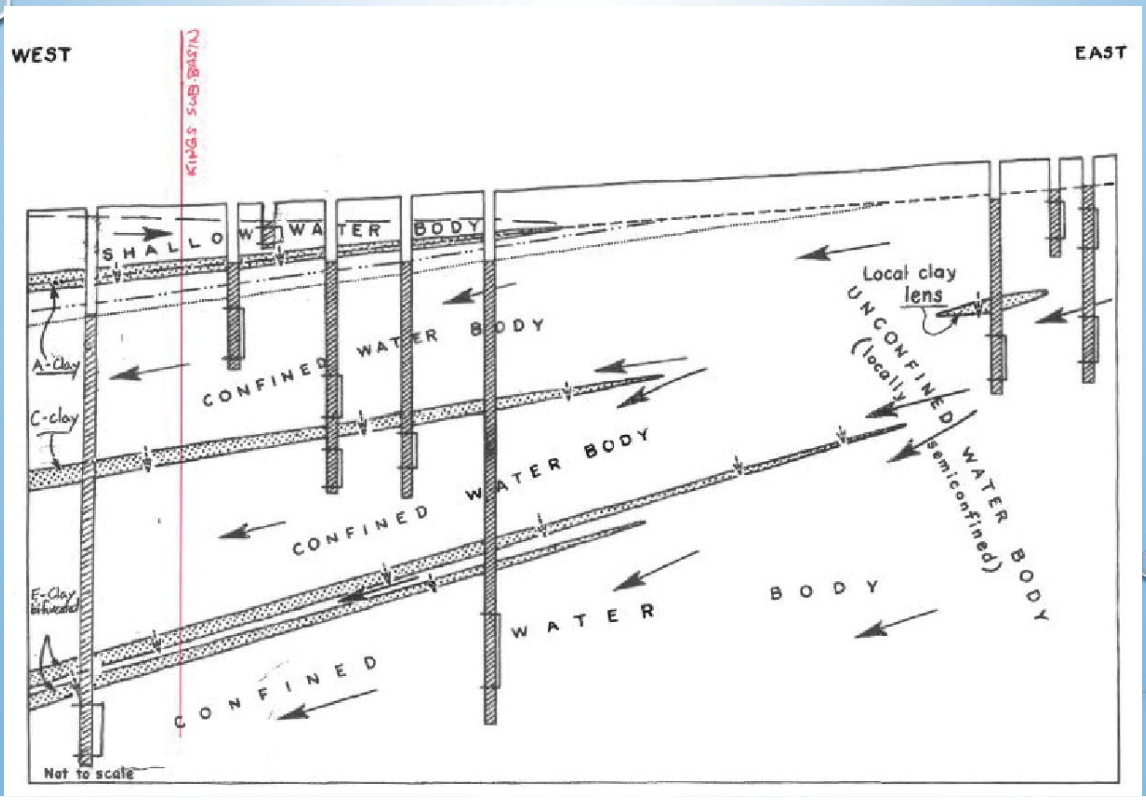
GSP DEVELOPMENT UPDATE

- GROUNDWATER CONDITIONS CHAPTER
  - GROUNDWATER ELEVATION AND DEPTH (CONTOUR MAPS)
  - GROUNDWATER FLOWS/MOVEMENT
  - GW STORAGE VARIATION
  - HYDROGRAPHS AND TRENDS
  - GROUNDWATER QUALITY
  - LAND SUBSIDENCE
  - SW-GW INTERACTION
  - GW DEPENDENT ECOSYSTEMS

GSP DEVELOPMENT UPDATE

- HYDROGEOLOGIC CONCEPTUAL MODEL CHAPTER
  - VISUAL AND NARRATIVE DESCRIPTION OF GROUNDWATER CONDITIONS
  - CROSS SECTIONS
  - SUMMARY OF AQUIFER PROPERTIES AND CONDITIONS
  - AQUIFER USES
  - GW QUALITY (CONTAMINANT MIGRATION)
  - SURFACE WATER FEATURES
  - RECHARGE AND DISCHARGE AREAS
  - SUB-BASIN VS GSA

COMPLICATED GEOLOGY
UNCONFINED VS CONFINED AQUIFERS



SURFACE WATER SUPPLY

- KINGS RIVER WATER SUPPLY TO NFKGSA MEMBERS IS HIGHLY VARIABLE

Kings River Headgate Diversions
NORTH FORK KINGS GSA

Preliminary – Subject to Change

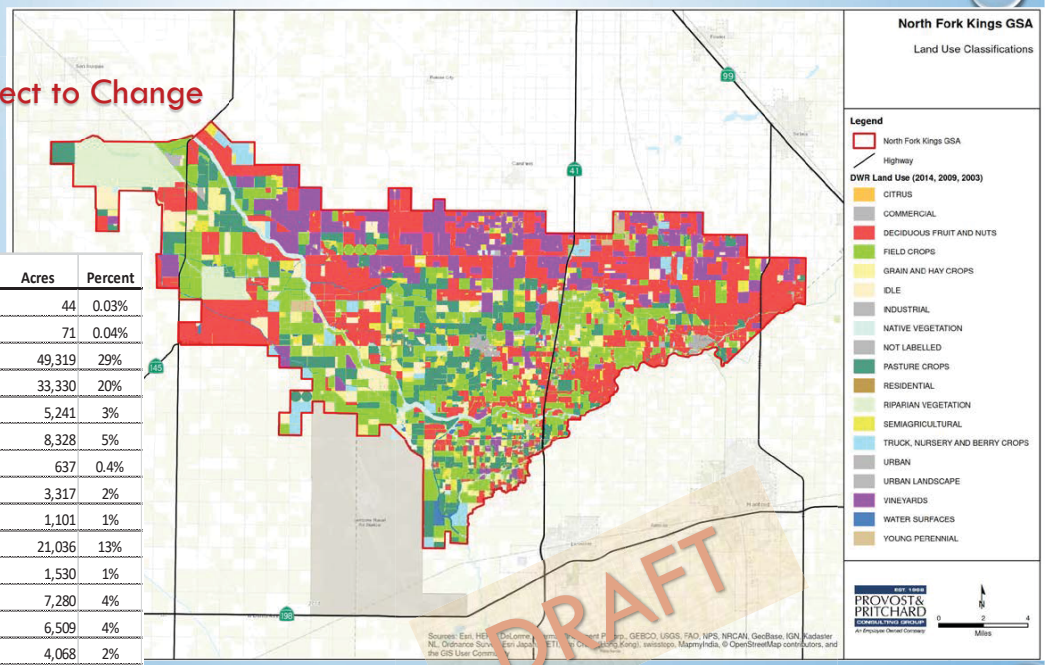
	Coordinated Kings period			
	High WY 1997 - 1998	Low WY 2006 - 2007	Average WY 1997/98 - 2009/10	WY 2010 - 2011
Burrel Ditch Company	4,860	1,785	5,485	11,732
Clark's Fork Recl District	2,337	801	1,406	2,388
Crescent Canal Company	31,777	3,429	14,157	38,178
Laguna Irrigation District	75,124	15,285	47,579	96,959
Liberty Canal Company	15,701	595	6,157	15,383
Murphy Slough Association	118,028	14,860	51,278	119,436
Stinson Canal & Irrigation Co.	26,097	3,916	10,728	59,671
Upper San Jose Water Company	2,914	436	2,302	3,810
Total	**276,838**	**41,107**	**139,091**	**347,557**
% Water Year	186%	41%		198%

All data through 2009 from KRWA Watermaster Reports. Other data from KRWA website.

- IMPACT OF RIVER SEEPAGE TO BE DETERMINED

NORTH FORK KINGS GSA LAND USE - 2014

Preliminary – Subject to Change

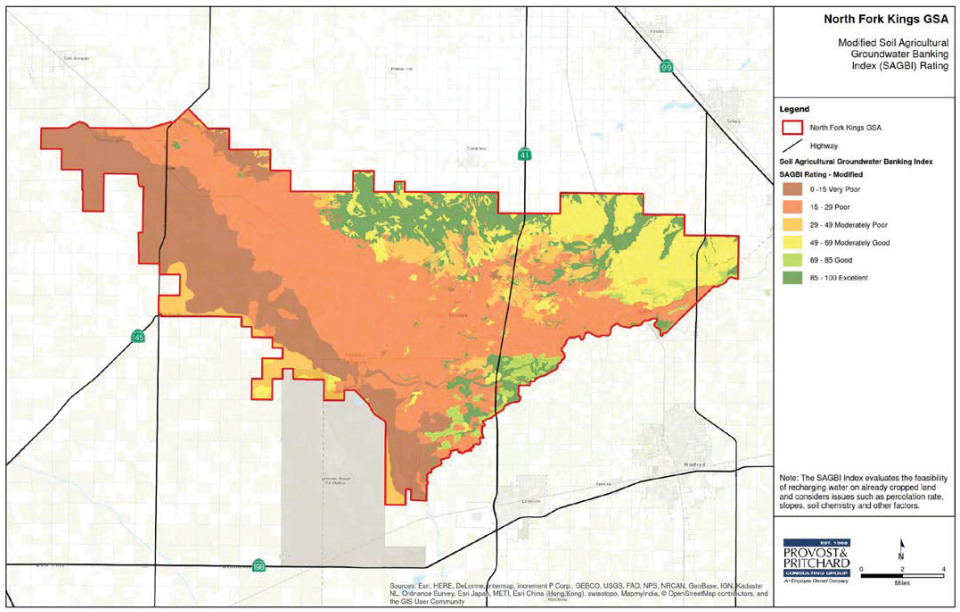


Land Use (per DWR)	Acres	Percent
CITRUS	44	0.03%
COMMERCIAL	71	0.04%
DECIDUOUS FRUIT AND NUTS	49,319	29%
FIELD CROPS	33,330	20%
GRAIN AND HAY CROPS	5,241	3%
IDLE	8,328	5%
INDUSTRIAL	637	0.4%
NATIVE VEGETATION	3,317	2%
NOT LABELED	1,101	1%
PASTURE CROPS	21,036	13%
RESIDENTIAL	1,530	1%
RIPARIAN VEGETATION	7,280	4%
SEMIAGRICULTURAL	6,509	4%
TRUCK, NURSERY AND BERRY CROPS	4,068	2%
URBAN	805	0.5%
URBAN LANDSCAPE	68	0.04%
VINEYARDS	22,626	13%
WATER SURFACES	2,048	1%
YOUNG PERENNIAL	796	0.5%
CROPS SUBTOTAL	142,969	85%
TOTAL	**168,154**	**100%**

- Preliminary estimate of annual water demand = 430,000± AF
- Portion of water demand is met by effective precipitation, could reduce annual demand for applied water to 350,000± AF
- Land use needs to be verified
- Water demand and effective precipitation to be refined

PROJECT DEVELOPMENT CONSIDERATION

- PORTIONS OF THE NFKGSA AREA APPEAR BETTER SUITED FOR GROUNDWATER RECHARGE THAN OTHERS
- MODIFIED SOIL AGRICULTURAL GROUNDWATER BANKING INDEX (SAGBI) IS ONE METHOD OF IDENTIFYING POTENTIAL RECHARGE AREAS



PROPOSED BUDGET FOR ENGINEER'S REPORT

North Fork Kings GSA 5-year Budget for Prop 218 Engineer's Report 2/28/2018

Category	Prior to 6/30/17	FY[a] 2017-2018	FY[a] 2018-2019	FY[a] 2019-2020	FY[a] 2020-2021	FY[a] 2021-2022	FY[a] 2022-2023	TOTAL
GSA Administration								
KRCD Staffing / Public Outreach		$ 69,000	$ 71,100	$ 73,200	$ 75,400	$ 77,700	$ 80,000	$ 377,400
Office Supplies / Postage / Outreach Materials		$ 6,000	$ 6,200	$ 6,400	$ 6,600	$ 2,000	$ 2,100	$ 23,300
Insurance		$ 2,000	$ 2,100	$ 2,200	$ 2,300	$ 2,400	$ 2,500	$ 11,500
Annual Audit		$ -	$ 4,000	$ 4,100	$ 4,200	$ 4,300	$ 4,400	$ 21,000
Miscellaneous Overhead		$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 7,500
Start-up Costs	$ 188,628		$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	$ 188,628	$ 78,500	$ 84,900	$ 87,400	$ 90,000	$ 87,900	$ 90,500	$ 440,700
Professional Services								
Project Management		$ 20,000	$ 20,600	$ 21,200	$ 21,800	$ 22,500	$ 23,200	$ 109,300
Funding Mechanism Assessment		$ 8,000	$ -	$ -	$ -	$ -	$ -	$ -
Prop 218 Engineer's Report/Elections		$ 30,000	$ 2,000	$ -	$ -	$ -	$ -	$ 2,000
Groundwater Sustainability Plan Preparation[b]		$ 150,000	$ 285,770	$ 80,000	$ -	$ -	$ -	$ 365,770
Legal, Litigation Reserve		$ 25,000	$ 25,800	$ 26,600	$ 27,400	$ 28,200	$ 29,000	$ 137,000
Lobbyist		$ 3,000	$ 3,100	$ 3,200	$ 3,300	$ 3,400	$ 3,500	$ 16,500
Grant Writing		$ 7,000	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	$ -	$ 243,000	$ 337,270	$ 131,000	$ 52,500	$ 54,100	$ 55,700	$ 630,570
~10% Contingency/Reserve		$ 19,296	$ 42,220	$ 21,840	$ 14,250	$ 14,200	$ 14,620	$ 107,130
Reimbursement to Member Agencies			$ 264,712	$ 264,712	$ -	$ -	$ -	$ 529,424
Total Estimated GSA Administration & Professional Services Cost	$ 188,628	$ 340,796	$ 729,102	$ 504,952	$ 156,750	$ 156,200	$ 160,820	$ 1,707,824
Enterprise Fund for GSP Implementation - Project Development / Groundwater Monitoring			$ 907,435	$ 1,131,585	$ 1,479,787	$ 1,480,337	$ 1,475,717	$ 6,474,861
Total Estimated Cost			**$ 1,636,537**	**$ 1,636,537**	**$ 1,636,537**	**$ 1,636,537**	**$ 1,636,537**	**$ 8,182,685**
Average Cost per Acre[c]			**$ 10.00**	**$ 10.00**	**$ 10.00**	**$ 10.00**	**$ 10.00**	**$ 50.00**

Notes: a Fiscal Year (FY) is July 1 - June 30
b GSP Preparation includes Inter-Basin and Intra-Basin Coordination
c NFKGSA Assessable Acres = 163,654