



SGMA IMPLEMENTATION

SALINAS VALLEY GROUNDWATER BASIN



MONTEREY COUNTY HAS ITS OWN WATER RESOURCES

- NACIMIENTO DAM BUILT 1957
- SAN ANTONIO DAM BUILT 1967
 - COMBINED STORAGE = 850,000 ACRE FEET
- CASTROVILLE SEAWATER INTRUSION PROJECT
 - 12,000 ACRES SERVED BY RECLAIMED WATER
- SALINAS VALLEY WATER PROJECT
 - INFLATABLE DAM DIVERSION FACILITY
- ROBUST GROUNDWATER BASIN



AGRICULTURAL GROUNDWATER USE IN THE SALINAS VALLEY

IRRIGATION WATER EXTRACTIONS IN MONTEREY COUNTY ARE 20% LOWER THAN 26 YEARS AGO

1996 EXTRACTIONS FOR IRRIGATION WATER = 563,438 ACRE FEET

2022 EXTRACTIONS FOR IRRIGATION WATER = 447,821 ACRE FEET

REDUCTION OF 20% IN 26 YEARS

REDUCTION OF 115,600 ACRE FEET

IRRIGATED ACRES INCREASED BY 5% AMOUNT IN SAME 26 YEARS

GROUNDWATER EXTRACTIONS AVERAGE 442,200 ACRE FEET FOR 2011-2021 (INCLUDES DROUGHTS)

IRRIGATION WATER EFFICIENCY

HOW DID MONTEREY COUNTY
FARMERS REDUCE IRRIGATION
WATER EXTRACTIONS WHILE
EXPANDING IRRIGATED ACRES?

- DECREASED WATER USE WHILE INCREASING YIELDS PER ACRE (BETTER AGRONOMICS)
- RESPONDED EFFICIENTLY TO INCREASED COST OF ELECTRICITY TO PUMP GROUNDWATER
- USE OF TECHNOLOGY TO MANAGE IRRIGATION FREQUENCIES AND DURATIONS
- MICRO IRRIGATION

SOIL BIODIVERSITY

- IMPROVEMENTS TO SOIL HEALTH PRACTICES
 - *COVER CROPPING*
 - *COMPOST AMENDMENTS*
 - *ORGANIC QUALITY ENHANCEMENTS*
- INCREASE SOIL WATER-HOLDING CAPACITY
- REDUCE IRRIGATION CYCLE FREQUENCIES



160 YEARS OF CROP
PRODUCTION IN
SALINAS VALLEY

GROUNDWATER SUSTAINABILITY PLANS

- 1 GSA WITH 6 SUB-BASIN PLANS
- 1 SUB-BASIN “CRITICAL” DUE TO SEAWATER INTRUSION
- 3 SUB-BASINS ARE IN “OVERDRAFT”
- 2 SUB-BASINS ARE “SUSTAINABLE”
- PLANS INCLUDE MANAGEMENT PRACTICES & MAJOR PROJECTS, ALL WITH SUSTAINABLE YIELDS
- DEMAND MANAGEMENT IS LOWEST PRIORITY FOR MANAGEMENT OF WATER USE
- LIMITED INTEREST IN WATER TRADING



IRRIGATION WATER USE PRACTICES SALINAS VALLEY GROUNDWATER BASIN

HIGH ADOPTION

DRIP IRRIGATION – 82% OF CROPS

CROP SELECTION & ROTATION

WATER RECYCLING

IRRIGATION WATER MANAGEMENT

SOIL BIODIVERSITY



MODERATE ADOPTION

PRECISION IRRIGATION PRACTICES

COMPOST & MULCHING

GOVERNMENTAL INCENTIVES



LOW ADOPTION

CONSERVATION TILLAGE

GENETIC ENGINEERING



PRESSURE POINTS FOR THE AG COMMUNITY

- 2 SUB-BASINS DEEMED “SUSTAINABLE” SO RELUCTANT TO PAY FOR WATER PROJECTS
- SEAWATER INTRUSION IS VERY TOUGH TO HALT AND REVERSE
- PROJECTS ESTIMATED TO COST \$600 MILLION OR MORE
- NO WATER EXTRACTION FEES ... YET
- MUNICIPAL EXTRactions ARE 24/7 AND NEED TO MOVE TO OTHER SOURCES
- DEMAND MANAGEMENT WILL DIVIDE THE “HAVES” FROM THE “HAVE NOTS”
- FOLLOWING OF EXPENSIVE FARMLAND WILL BE DIFFICULT TO JUSTIFY ... OR AFFORD



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