

Agenda

- Welcome and Introductions
- Overview and Status of DAC Outreach Program
- Non-Profit Assistance for the DAC Outreach Program
- Overview of DAC Groundwater Quality Evaluation
- Presentation of Updated DAC Characterization Maps
- Next Steps

Overview and Status of DAC Outreach Program

Overview of DAC Outreach Program

- Pilot program designed to improve outreach to disadvantaged communities (DACs) with respect to the Integrated Regional Water Management (IRWM) Program
- Expand DAC outreach activities
- Identify and characterize DAC areas and flood control needs
- Identify DAC issues and potential solutions (projects)
- Develop engineering and management plans to assist development of priority projects
- Coordinate with IRWM Plan Update

DAC Outreach Program Companion Project to IRWM Plan Update

- Planning**
 - Coordination with IRWM Plan Update
 - Funding from and Coordination with DWR Pilot Outreach Program
- Outreach Activities**
 - Meetings - Project Partners, Issue Groups, DAC Workshops, Public Stakeholders
 - Communications - Press Releases, Emails, Notices, Website
- Outcomes**
 - Identification of Issues and Projects
 - Update maps of DACs in the Coachella Valley, Flood Control Mapping
 - Project Development, Identification, Planning and Engineering
 - Create an overview document that describes barriers to DAC involvement in IRWM efforts, and potential solutions to such barriers

Need more information? Visit our website! www.cvrwmg.org

Expanded DAC Outreach Activities: Update

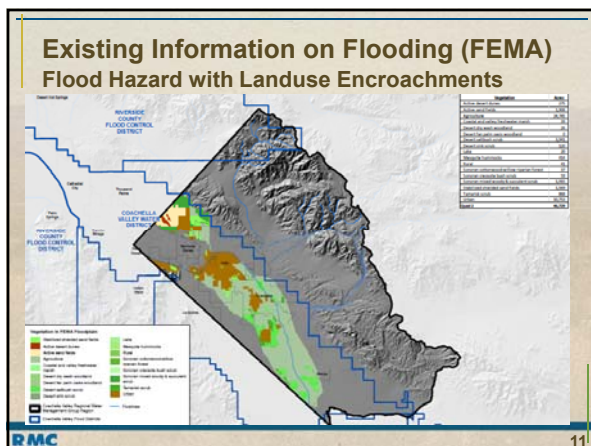
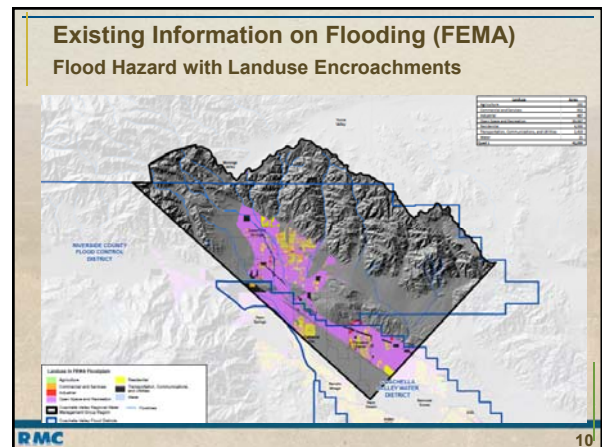
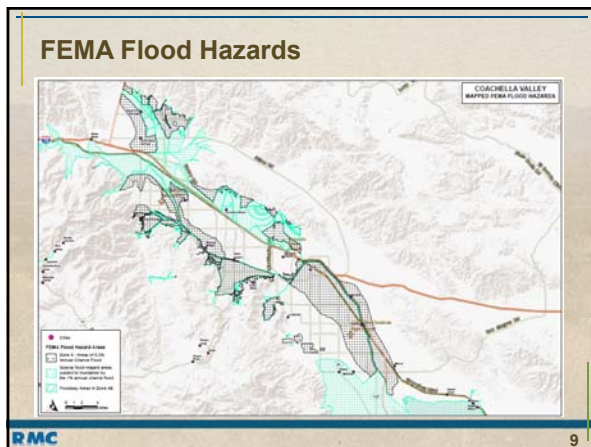
- Engage Planning Partners – July
- Expand to agencies and non-profit groups - July and August
- Expand with recommendations (see above) and DAC Workshop – September
- Mail, email, phone, web, fliers
- All contact info added to DAC outreach database
- Coordination with non-profit assistance for mapping
- Expand to broader community (Dec – April)

RMC 7

Flood Management Study

- Identify and characterize flooding locations
- Utilize existing information – FEMA
- Add State info - "Flood Future: Recommendations for Managing CA's Flood Risk" Report
- Identify current and planned flood control projects

RMC 8



Non-Profit Assistance for the DAC Outreach Program

RMC 12

Non-Profit Assistance - Scope

- Non-profits hired to provide on-the-ground support to the DAC Outreach Program using their local expertise and knowledge
- Support will be on three primary tasks:
 - **Outreach:** Promoting attendance at and attending DAC workshops/meetings, providing written and/or verbal translation services, etc.
 - **Mapping:** Participate in on-the-ground survey work and outreach to refine DAC maps and identify where DAC issues are present
 - **Final Report:** Finalize information to describe what worked/what did not work and how to resolve barriers to DAC Outreach and involvement in IRWM efforts

RMC 13

Non-Profit Assistance- Schedule

- Timeline:
 - September 13 Workshop – stakeholders asked to fill-out a form indicating interest and abilities
 - Form sent to known DAC stakeholders
 - November – Non-profit interviews conducted. Selection based on past project work, type of expertise, and geographical focus area
 - December – Contracting with non-profit partners
 - January - April 2013 – work executed

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Non-Profit Approach to Mapping and Characterizing DAC Locations

- Utilize existing data - satellite imaging, DWR, County of Riverside, local agencies
- Training for *Promotora*-students at Loma Linda University Geoinformatics Laboratory in GIS and GPS field methods
- Ground-validate existing data through field work of *Promotora*-student teams
- Local communities engaged to review and add to data
- Issue identification and project development

RMC 15

Non-Profit Output (partial list)

- A group of *promotores* from various organizations trained in community assessment and mapping
- Updated number of mobile home parks and estimated populations
- Identification of areas with high-occurrence of on-site wastewater systems OSW failures
- Coordination with IRWM Plan Groundwater Quality survey needs
- Issue and project identification
- Updated database for IRWM Plan

RMC 16

DAC Groundwater Quality Evaluation

RMC 17

DAC Groundwater Quality Evaluation

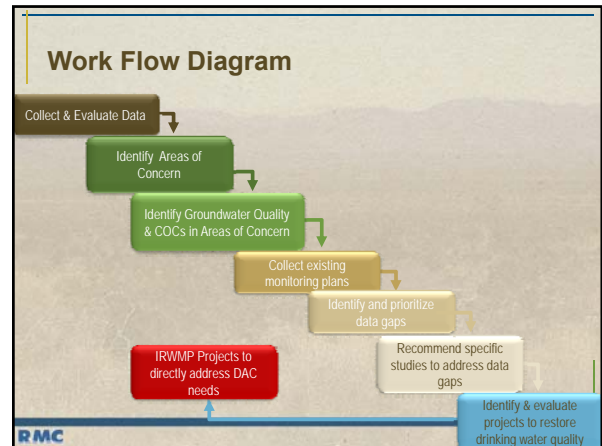
- Discussion Items for Today:
 - Steps 1 & 2: Data Collection and Analysis
 - Step 3: Problem Identification and Solution Formulation
 - Step 4: Data Gap Analysis
 - Steps 5 & 6: Monitoring Plan
 - Next Steps

RMC 18

Overview of DAC Groundwater Quality Evaluation

- Conducted to assess groundwater quality issues in and around DACs
- Addresses stakeholder concerns regarding the quality of drinking water supplies
- Goals include:
 - Identify Areas of Concern (AOCs)
 - Identify Constituents of Concern (COCs)
 - Consider methods for addressing AOCs in areas where COCs are above primary drinking water standards
 - Identify projects to address the COCs found in AOCs
 - Develop monitoring plan to fill identified data gaps.

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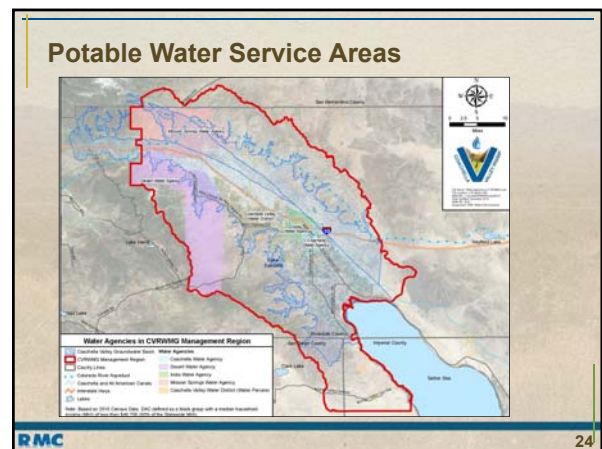
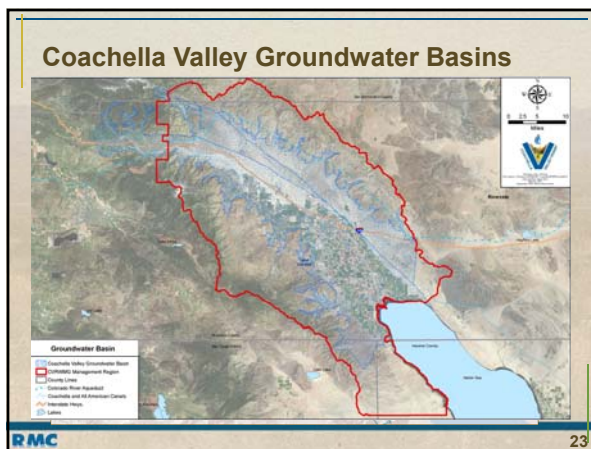
Steps 1&2 – Data Collection and Analysis

RMC 21

Data Used

- Groundwater Basins – DWR
- Geology/Hydrogeology – DWR, USGS
- Potable Water Service Areas – Water Agencies
- DACs – 2010 Census
- Well Construction Information - DWR
- Water Quality Data
 - GeoTracker/GAMA
 - Water Quality Portal

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Identified Constituents of Concern

| Constituent of Concern | Primary MCL | Average Concentration | No. of Sampling Points |
|------------------------|------------------|-----------------------|------------------------|
| Arsenic | 10 mg/L | 237 mg/L | 8 |
| Fluoride | 2 mg/L | 6.6 mg/L | 200 |
| Nitrate - N | 10 mg/L | 30.2 mg/L | 302 |
| Uranium | 30 mg/L/20 pCi/L | 28.6 pCi/L | 52 |

RMC 31

Treatment Alternatives

| | Adsorptive Media | Aeration/Air Stripping | Biological Filtration | Biological Treatment | Chemical Treatment | Chloramine | Chlorine | Chlorine Dioxide | Conventional Treatment | Direct Filtration | Electrodialysis | Granulated Activated Carbon | Ion Exchange | Membrane Filtration | Membrane Separation | Ozone | Permanganate | Powdered Activated Carbon | Precipitative Softening | Slow Sand Filtration | Ultraviolet Irradiation | |
|----------|------------------|------------------------|-----------------------|----------------------|--------------------|------------|----------|------------------|------------------------|-------------------|-----------------|-----------------------------|--------------|---------------------|---------------------|-------|--------------|---------------------------|-------------------------|----------------------|-------------------------|--|
| Arsenic | ** | * | | | | | | | ** | | | * | | | | | | | | | | |
| Fluoride | ** | | | * | | | | | * | | | * | | | ** | | | | * | | | |
| Uranium | ** | | | * | | | | | ** | | | ** | | | ** | | | | * | | | |
| Nitrate | | | | * | | | | | | ** | ** | ** | | ** | ** | | | | * | | | |

RMC 32

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| Fluoride | ** | | | * | | | | | * | | | * | | | ** | | | | * | | | |
| Uranium | ** | | | * | | | | | ** | | | ** | | | ** | | | | * | | | |
| Nitrate | | | | * | | | | | | ** | ** | ** | | ** | ** | | | | * | | | |

++ - Best Available Technology

RMC 33

Step 4 – Data Gap Analysis

RMC 34

- ### Identified Data Gaps
- Exact location of wells (longitude/latitude or street address)
 - Volume of water being pumped and used
 - Water quality confirmation
 - System selection
- RMC 35

Step 5 – Monitoring plan

RMC 36

Outline of Monitoring Program

- Program development in progress
- Using existing programs as basis:
 - CASGEM
 - Local agency monitoring programs
 - Other?
- Combine existing water level monitoring with water quality monitoring
- Ensure upload of water quality data to State database (GAMA-GeoTracker)

RMC 37

Draft Groundwater Issues Survey – Discussion

RMC 38

Non-Profit Assistance – Potential Survey

- Surveys will be conducted by non-profit partners to assess specific information regarding demographics, groundwater quality, and local knowledge
- Review survey and update
- Any comments on the proposed survey?

RMC 39

DAC Characterization Maps

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DAC Characterization Maps

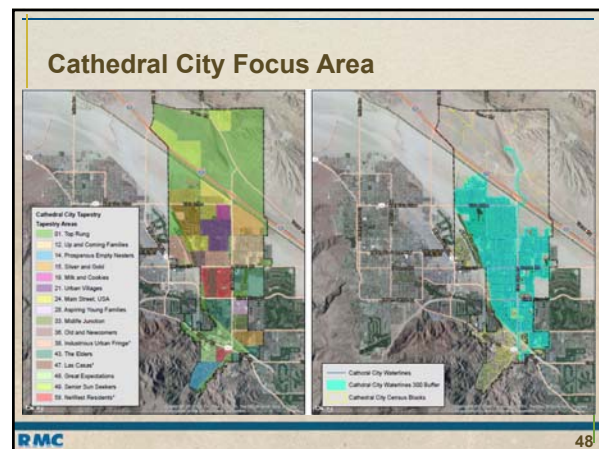
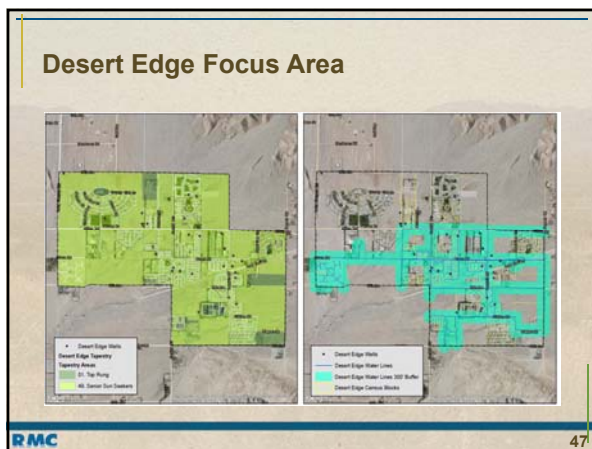
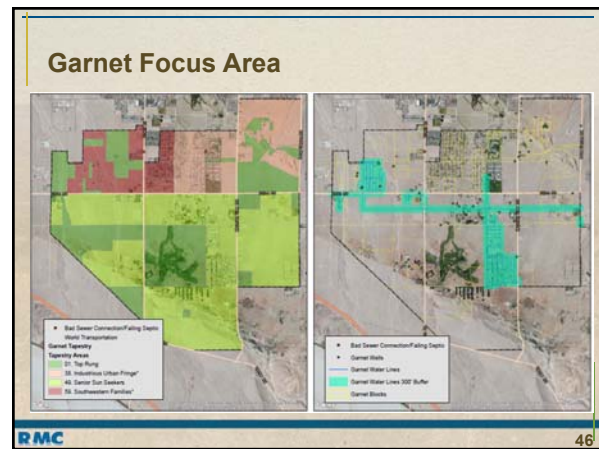
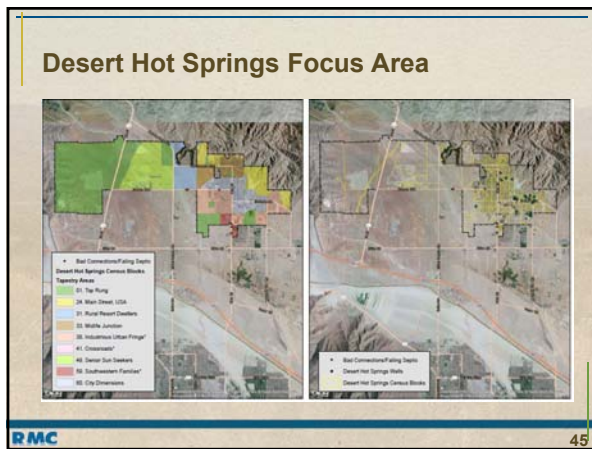
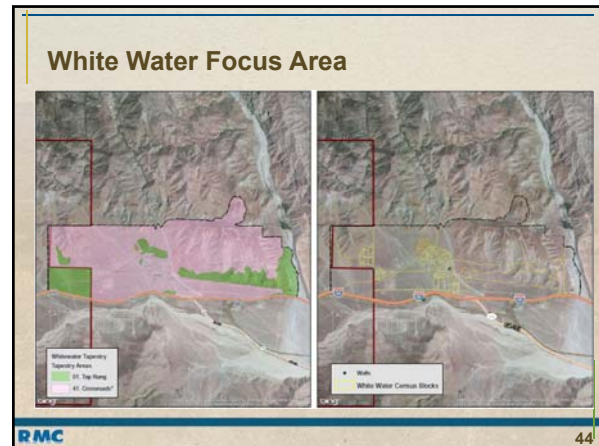
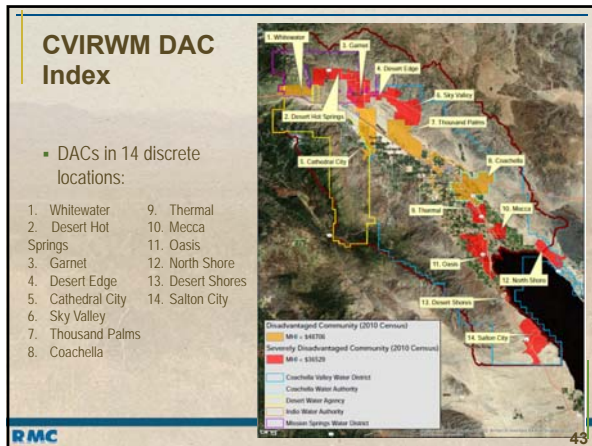
- Issue: Census data generally used to characterize disadvantaged communities may overlook smaller "pockets" of DACs
- Refine DAC Areas and Neighborhoods
 - Census and Demography Data (use at a refined scale)
 - Tapestry Community Data
 - On-the-ground data collected by local non-profit organizations
 - Focus on DACs that are not provided water or wastewater services by local municipalities (areas of focus)

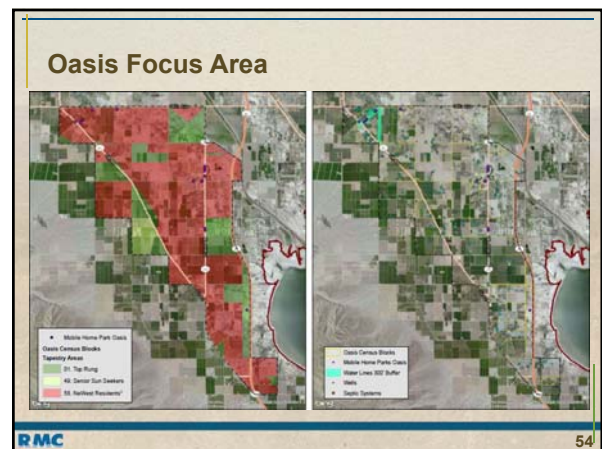
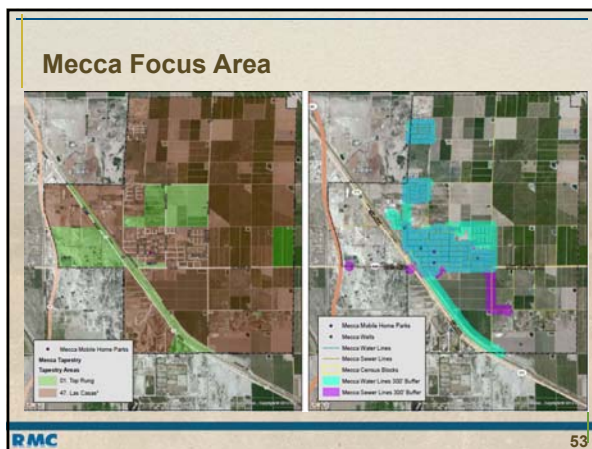
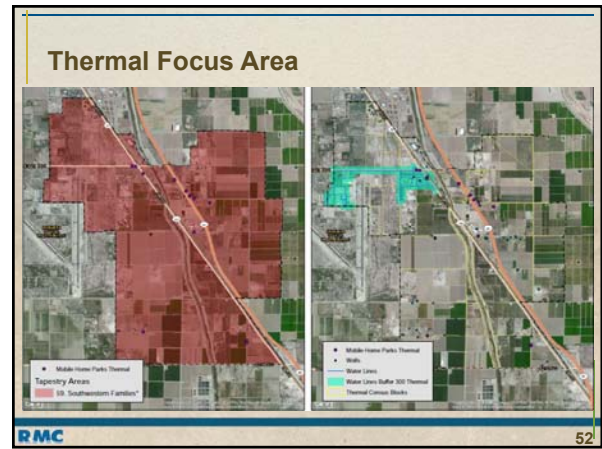
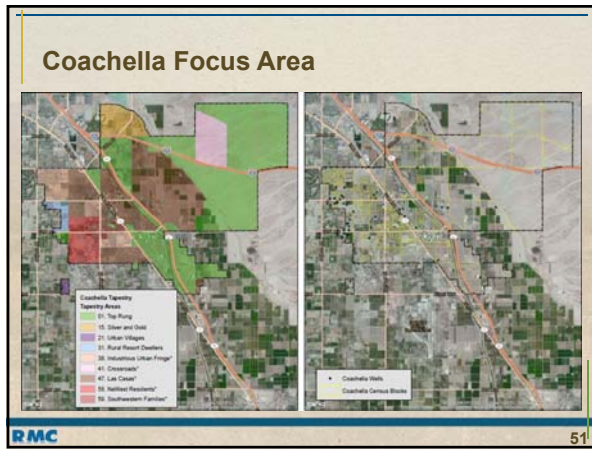
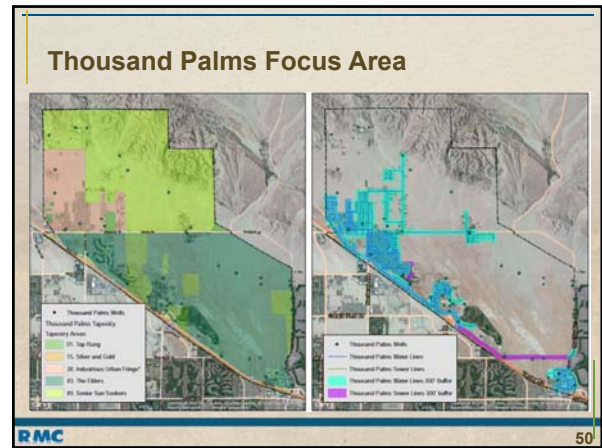
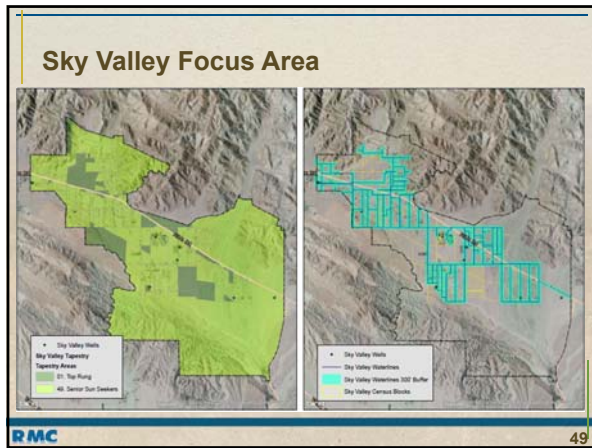
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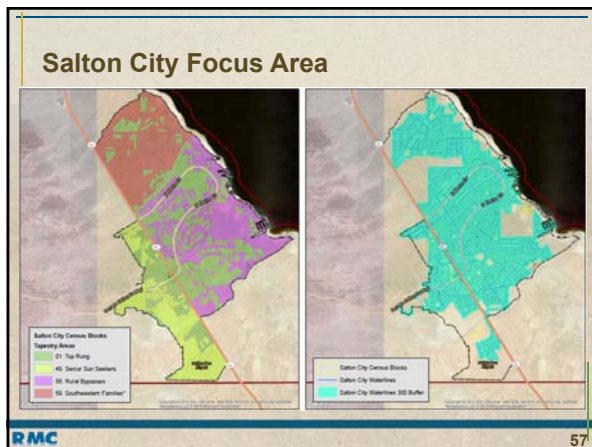
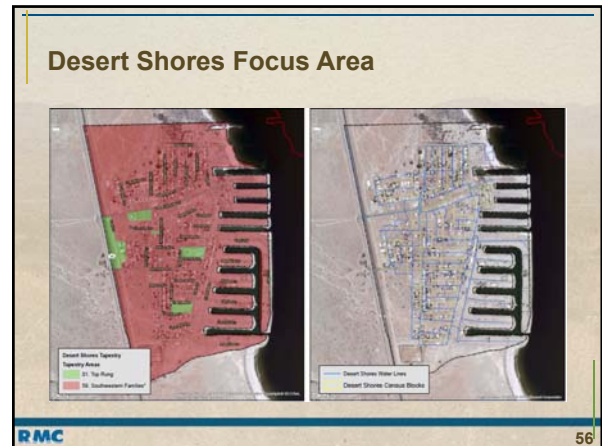
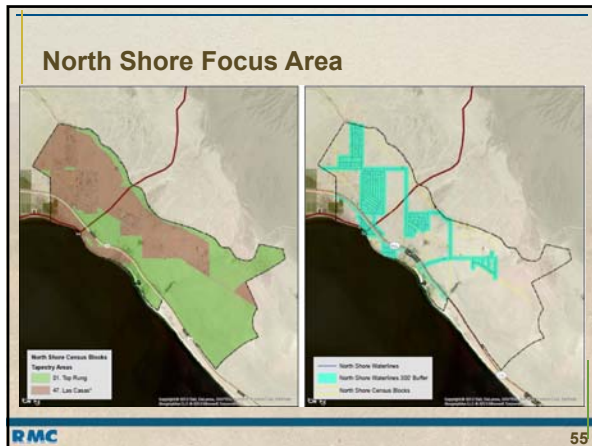
Study Area

- Coachella Valley IRWM Region
- DAC Areas according to the State of California – income less than 80% of the Statewide Median Household Income (MHI)
- 2010 MHI = \$60,882
 - DAC = 80% MHI \$48,706
 - SDAC = 60% MHI \$36,529

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- ### Next Steps
- Finalize Non-profit Contracts
 - Initiate Non-profit Mapping and Characterization
 - Workshop #3 – March 14, 2013
 - East Valley / West Valley Subregional Workshops – TBD
- RMC 58

CVRWG
Coachella Valley
Regional Water Management Group

City of Coachella | DESERT WATER | MSWD

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