

Water System Needs Assessments in Small, Rural, Disadvantaged Communities

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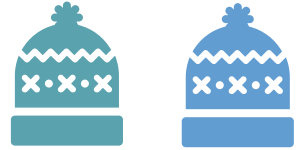
IRWMP Coordinator

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California
Rural Water Association

Overview



- Two hats: CRWA staff and IRWMP practitioner
- Rural/DAC/desert/headwaters perspective
- Needs assessments through CRWA
- Inyo-Mono IRWMP needs assessments
- Indicators of unsustainability
- Recommendations





California Rural Water Association

Mission: To provide training, technical assistance, resources and information to assist water and wastewater utilities in achieving high standards of service.

- Programs that include formal needs assessments:
 - State Revolving Fund through SWRCB
 - Prop. 1 Technical Assistance to DACs through SWRCB
 - Integrated Regional Water Management Program
 - Tribal program



Mojave IRWMP: Small Water Systems Program

- Partner with Mojave Water Agencies
- Work with 40 small, DAC water systems in region
- Menu of services
 - Needs Assessment
 - Rate Analysis
 - Corporate Compliance Reviews
 - Drought /Water Conservation Planning
 - Energy Efficiency
 - Preliminary Engineer Pre-App and Application Funding Support
- ACWA Clair Hill Award for Excellence in 2016
- <http://www.smallwatersystems.org/>



IRWM Disadvantaged Communities Involvement Program

- A primary objective: conduct DAC needs assessments throughout CA to develop statewide snapshot of need
 - Initial step in larger process of helping DACs
- CRWA working in several areas: Lahontan Funding Area, Santa Ana Watershed Project Authority Funding Area, Sacramento River Funding Area
- Similar outcomes to other programs but requirements differ slightly
 - Attempt to standardize or at least share information among regions



Inyo-Mono IRWM Region

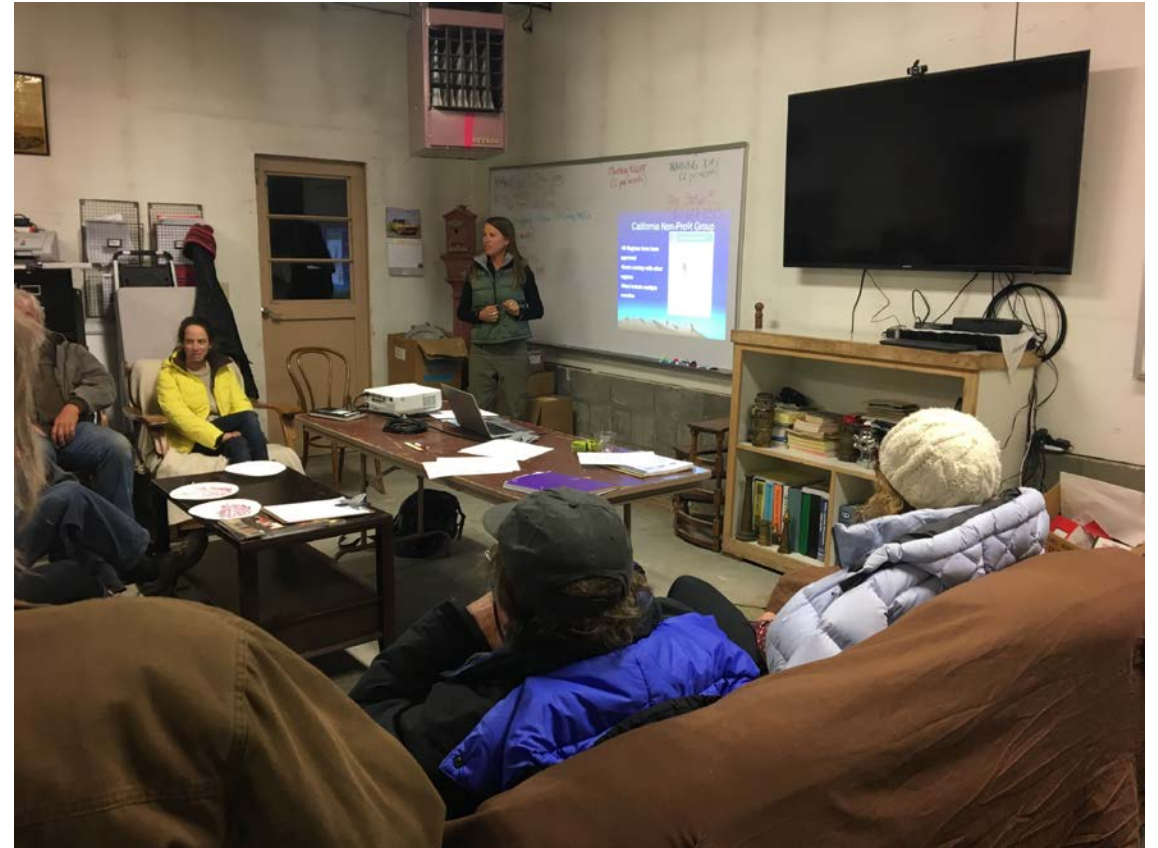
- Representative of IRWM experience but with regional differences
- Assessing needs since Day 1 as part of IRWM process
- Formal and informal needs assessments:
 - Formal: Meeting between CRWA & water system to complete NA form
 - 32 NAs funded through Prop. 84 planning and DAC grants, now Prop. 1 DACI
 - Informal: Learn through outreach: public meetings, one-on-one meetings, daily correspondence

Pine Creek Village

TMF Element	Yes/No	Notes
Service Area Map	1	
a. sources	1	
b. treatment facilities	1	
c. pumping stations	1	
d. pressure zones	1	
e. storage tanks	1	
f. piping/valves/hydrants	1	
g. PCAs	0	no problems
h. projected ten year growth boundaries	0	no projected growth; environmental reports did not work
Operator Certification	1	DI
Operator Contract		
a. duties	0	
b. time spent	0	
c. complaint procedures	0	
d. compliance discrepancies	0	
e. emergencies	0	
Source Capacity (Sec. 64554)	1	400 gpm
Future Source Capacity	1	150 gpm more
Water Conservation Plan	0	
Metering	0	Free water
Security	1	blended, locked, iron doors, lights
Operating Plan		
a. routine tasks (daily, weekly, monthly, yearly)	1	
b. complaint procedures	1	
c. compliance discrepancies	1	
d. emergencies	1	
e. record keeping	1	
Training Plan		
a. operators	1	up to date
b. governing board	0	
c. other staff	0	
Type of Ownership		
a. documentation	1	
b. property deeds	1	
Water Rights	1	
Organizational chart	0	
Board meetings	0	
Employee list	0	
Contract operator info	0	
Emergency response plan	0	updates to system so water supply does not diminish
a. disaster list	0	no written plan
b. emergency contact list	0	
c. System inventory	0	
d. emergency equipment/supplier list	0	
e. emergency interconnects	0	
f. EOC location	0	
g. emergency phone/radio communications	0	
h. agency coordination procedures	0	
i. technical/financial assistance	0	
j. public notification procedures	0	
k. facility damage assessment procedures	0	
l. emergency source activation and repairs	0	
m. repair progress monitoring procedures	0	
n. damage and repair documentation procedures	0	
o. Normal operations/reporting procedures	0	
Policies	0	
a. nonpayment	0	
b. unauthorized use of water	0	
c. hours worked/overtime	0	
d. complaint responses	0	
e. governing board activities	0	
f. Maintenance/repair/construction documentation	0	
5 year Budget	0	owners provide
Capital Improvement Plan	0	owners provide capitol
Financial Policy		
a. budget control - cash receipts/misbursements	0	
b. budget control - bank accounts	0	
c. budget control - payroll	0	
d. financial reports - customer receivables	0	
e. financial reports - check register review	0	
f. financial reports - bank reconciliation	0	
g. financial reports - budget comparison	0	
h. financial reports - quarterly comparative balance sheet	0	
i. financial reports - tax returns	0	
j. criteria & withdrawal guidelines - CIP reserve	0	
k. criteria & withdrawal guidelines - O&M reserve	0	
l. criteria & withdrawal guidelines - emergency reserve	0	
m. criteria & withdrawal guidelines - other reserves	0	
n. reporting procedures	0	

Inyo-Mono: what we learn - specifics

- Infrastructure
- Technical, managerial, financial (TMF)
- Projects
- Sample findings
 - Lundy Mutual Water Company
 - Big Pine Paiute Tribe & Big Pine CSD
 - Keeler CSD



Inyo-Mono: what we learn regionally

- Regional trends
 - Technical: contamination issues, aging infrastructure
 - Managerial: staff & board turnover, lack of records, lacking written operator instructions & job responsibilities, water conservation plans, emergency prevention
 - Financial: lacking 5-year budgets, capital improvement plans, project needs
- Challenges: long travel distances, skeptical community members, difficulty communicating & scheduling, busy staff & board members



Inyo-Mono: what we learn – big picture

- Needs change over time
- Regular & repeated contact important
- On-site visits
- Listening



Five indicators of unsustainability

1. Lack of attention to rates
2. Lack of attention to system maintenance, repairs, replacement
3. Lack of support and understanding in community
4. Turnover of staff and board members
5. Lack of expertise, know-how among board and staff



Recommendations to State

- Utilize what IRWM process & practitioners already know
- Utilize IRWM practitioners and networks for future assessments
- Utilize service providers (CRWA, RCAC, others) who have experience doing assessments

Thank you!



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