

Integration between Source Water Planning and Municipal and Local Planning

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Colorado source water assessment and protection program





SWAP BASICS





Background of the source water assessment and protection program

• Assessment

1600 reports completed in Colorado in 2001



• Protection

using the screening level assessments, public water systems are encouraged to voluntarily develop a protection plan

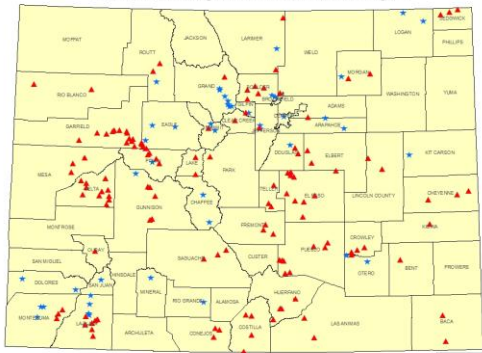


What is the statewide status of source water protection efforts?

- 226 source water protection (SWP) plans in CO
- 2.35 million people served by PWS with SWP plans
- financial and technical assistance provided to complete SWP plans (\$5,000 grant program)
- protection plans specifically identify GIS spatial information with regard to water supply areas
- Colorado Rural Water Association employees (6) working across the state on protection plans
- CDPHE and USFS have an MOU to collaborate on SWP areas



Communities Working with CRWA's Source Water Program



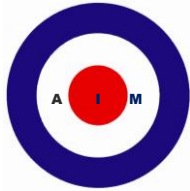
Map developed by Colorado Rural Water Association
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Legend
 ▲ Completed SWP's
 ▲ SWP's in Progress
 □ County Boundaries

Future of drinking water protection & municipal and local support

AIM” is three part process

- 1. Awareness
- 2. Information sharing
- 3. Management structure





Colorado Rural Water Association Source Water Protection Program

- History of program
- National Rural Water Association
- Program support: USDA and CDPHE
- Technical Assistance to rural communities



CRWA Completed Source Water Protection Plans: 155

Academy WSD	Crawford Mesa WA	Goodman POA	Nederland	Sedgwick
Agular	Creede	Gunnison	New Castle	Silt
Alma	Crested Butte South MD	Gunnison County	Northern Colorado Water Association	Silver Heights WSD
Animas Water Company	Crowley County WA	Hermosa MWV	Oak Creek	Silverton, Town of
Arapaho Water Company	Crowley County WS	Hotchkiss	Oak Meadows SC	Sopris Village HOA
Aspen	Cuchara WSD	Huajitola Valley Inc.	Oak Meadows Water	Springfield
Aspen Mesa HOA	Doe-trail	Hugo	Olney Springs	St. Charles Mesa WD
Avondale WSD	Deerwood Service Co.	Jamestown	Oriental City	Straburg
Basalt	Durango	Julienburg	Orday	Stratmoor Hills WD
Beulah Water Works Dist.	Durango - Animas	Kitt Carson	Ovid	Stucker Mesa
Black Bear Lodge	Durango LaPlata County	K-V HOA	Panora	Tabernash Meadows WSD
Blanca	Eds	Lake Creek MD	Parachute	Talbot Enterprises, Inc.
Blue Sky Ranch	Edgemont Ranch MD	Lalara	Park Center WD	Trinidad
Bone Mesa	Elizabeth	Las Animas	Parkview Metro District	Triview Metro District
Brush	El Rancho Florida WD	LaVeta	ToView WD	Upper Surface Creek DWUA
Campo	Ellbert WSD	Left Hand WD	Peezet, Town of	Valley View Hot Springs
Canon City	Ellcott Plaza	Limon	Pine Brook WD	Victor
Canyon Creek Estates HOA	Erie	Little Elk Creek HOA	Pine Drive WD	Walsenburg
Carbondale	Evergreen Metro	Little Thompson WD	Pitkin Mesa Pipeline Co.	Ward
Castlewood Canyon St. Park	Falls Creek Ranch	Manco	Powderhorn Ski Area	Westbank Mesa HOA
Cattle Creek WUA	Florence	Mancos Rural Water Co.	Prairie View Subdivision	Westbank Ranch HOA
Cedarledge	Forest View Acres WD	Manitou Springs	Purgatory MD	Wigwam Mutual Water Co.
Chapman Wells	Freeman Creek PA	Merker	Ramsah	Wintler Cottages
ChristLife Community Church	Fl. Garland WSD	Meridian Lake Park	Rangeley	WJ Ranch MD
Coally Domestic Water Co.	Garcia Domestic WUA	Mesa Cortina WSD	Red Table Acres HOA	Woodmoor WDS
Colbran	Gatesway MD	Mesa Verde National Park	Ridgeway	Woody Creek HOA
Colorado Centre MD	Georgetown	Mesa WDS	Rifle	Yampa
Colorado City MD	Glacier Club	Mid Colorado Investment	Romeo	Youtbey WC
Colorado Mountain College	Glenwood Springs	Mitchell Cooper D & P	Rye	
Colvig Silver Camps		Morgan County Quality WD	Saguache	
Crowford		Mt. Crested Butte WSD	San Luis WSD	
			Sanford	



CRWA In Progress Source Water Protection Plans: 47

- | | | |
|-----------------------------|------------------------------------|-----------------------------------|
| Akron, Town of | Garfield County/CCE HOA | Orchard Estates |
| Black Hawk, City of | Granby Silver Creek WWWW Authority | Palmer Lake, Town of |
| Boulder, City of | Granby, Town of | Rockvale, Town of |
| Buffalo Mountain MD | Grand County WSD #1 | Rocky Ford, Town of |
| Cragmont Water | Gypsum, Town of | Sage WUA |
| Crestone, Town of | Hamilton Creek MD | Shannon WSD |
| Crook, Town of | Homestead Water Company | Shawnee WCA |
| Dallas Creek WC | Lafayette, City of | Simla, Town of |
| Deer Trail | La Junta, City of | Snowmass WSD |
| Denver Water | Marble WC | Spanish Peaks Village Tract II WA |
| East Dillon WD | Mesa Antero WA | Spring Park Meadows HOA |
| Flagler, Town of | Monte Vista, City of | Telluride, Town of |
| Fleming, Town of | Monument, Town of | Wiggins, Town of |
| Forest Hills Metro District | Moraine Park WS | Winter Park Ranch WSD |
| Fort Collins, City of | Ophir, Town of | Winter Park WSD |
| Fraser, Town of | | YMCA Snow Mountain Ranch |

The contents of this presentation reflect the view of the presenter, not of CML.





Developing a Source Water Protection Plan



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A.I.M Approach at the Local Level

Awareness



- Value of drinking water source
- Importance of preventing contamination
- Value of collaboration & partnerships

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A.I.M Approach at the Local Level

Information Sharing



- During the Planning and Implementation
- Non-regulatory vs. Regulatory Approaches
- Education and Outreach

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A.I.M Approach at the Local Level

Management Approaches

- Emergency response cards
- Call down lists
- Signage on roadways
- Security of water system
- Water quality monitoring
- Municipal Ordinance
- Zoning regulations
- Master Planning language
- Building networks, relationships, partnerships



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USFS and CDPHE MOU

- Active since September 2009, renewed for 5 years in 2014
- Public water systems benefit from a mutual agreement between agencies to protect water resources
- MOU outlines strategies to coordinate on protection efforts
- Strategies include: identify and designates municipal supply watersheds, collaborate and understand local protection planning efforts and how to integrate with these efforts
- The agreement has accomplished: increase awareness, better spill/incident response, wildfire risk reduction, balance of oil and gas development, collaborative communication, effective updates of land use and forest management plans.

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Strengths of MOU's



- Establishes a very identifiable collaborative approach and mutual commitments
- Protection plan development partners get more support and are motivated to complete plans
- Plans have more of a “shelf life”
- MOU can be a framework for future administrations to follow



Highlights of MOU with Counties

Components (A + I + M)

1. Awareness (“A”)

- ❖ Recognizes plan completed
- ❖ County & public water system distribute plan to staff & agencies
- ❖ Recognize shared responsibilities to protect water supplies



Highlights of MOU with Counties

2. Information Sharing (“I”)



- ❖ Public water system provides updated geographic information system spatial data to County
- ❖ County refers all requests for data to public water system
- ❖ County may enter into data sharing agreement with Colorado Department of Public Health & Environment to obtain statewide data
- ❖ Public water system will share information & encourage input from county staff on plan implementation
- ❖ Public water system provides annual updates to County on implementation of source water protection plan



Highlights of MOU with Counties

3. Management (“M”)
both parties agree to coordinate on management strategies to protect drinking water
- ❖ Acknowledge shared jurisdiction
 - ❖ Collaborate to identify potential mutual concerns in source water areas
 - ❖ County will provide opportunity to review & comment on land use in source water areas
 - ❖ Independently utilize own fiscal resources
 - ❖ Parties acknowledge ability to adopt & coordinate on watershed protection strategies
 - ❖ County & public water system review wastewater facility plans



How Can CML “AIM” for Source Water Protection?

➤ Awareness (“A”)

- Educate yourself on local SWP efforts
- Become involved locally
- Educate others CML members and planning organizations



How Can CML “AIM” for Source Water Protection?

➤ Information Sharing (“I”)

- Planning documents with water systems
- GIS information
- Land management decisions and opportunities for local input



How Can CML "AIM" for Source Water Protection?

➤ Management ("M")

both parties agree to coordinate on management strategies to protect drinking water

- Acknowledge shared commitment to endorse drinking water protection
- CDPHE and CML should consider an MOU, similar to the USFS and County MOU
- Establish a workgroup to design and draft consistent drinking water protection master planning language in planning documents and master plan
- Establish a consistent educational program about SWAP to Planning Managers, Executive CML members about the protection of local drinking water resource



Take Home Messages



- We all have a mutual responsibility for "AIM"ing for Source Water Protection
- Review the Awareness, Information Sharing, and Management Approaches in this presentation
- Implement, implement, implement
- Foster a behavioral change in your local area



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Contact information

- Source water assessment and protection website and grant information
- Google: Colorado SWAP or Colorado Rural Water Association:
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