**MEMO**

To: Ben Wade, CWCB
From: Amelia Nuding, Western Resource Advocates
RE: Final Report regarding the "Tap Fee Workshop Series in Colorado"
Date: December 21, 2016

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This memo provides a final completion report for WRA's Tap Fee Workshop Series in Colorado (PO#: POGGI PDAA 20170000000000000044). This report includes a summary of the two previous interim reports, an analysis of attendee comments and feedback from the workshop series, and suggestions for how the CWCB and other stakeholders can best advance the adoption of conservation-oriented tap fees.

## I. Workshop Development & Outreach

Successes

We spent a significant amount of time conducting outreach to individuals to make them aware of the workshop and to get a better understanding of the tap fee-related issues they are facing, so that it would better inform our workshop. We conducted outreach to almost 300 individuals by phone, in-person and/or email, as summarized in Table 1 below.

In addition, we were able to promote the workshop through several large listservs affiliated with:

- Colorado Water Conservation Board
- the Colorado Municipal League
- the Northwest Colorado Council of Governments (water Quality/Quantity committee)
- the Colorado Basin Roundtable
- the Rocky Mountain Section of the American Water Works Association (RMSAWWA) /Rocky Mountain Water Environment Association (RMWEA) eRumbles newsletter
- Northern Colorado Home Builders Association

Table 1. Summary of Outreach and Attendance

| | **Glenwood Springs** | **Loveland** | **Castle Rock** | **Totals** |
|---|---|---|---|---|
| # Persons – reached out to | 121 | 74 | 96 | 291 |
| RSVPs | 19 | 46 | 28 | 93 |
| **Actual Number of Attendees** | **13** | **35** | **26** | **74** |

"Reached out to" means an email was sent, or phone call placed.

Obstacles

It was more difficult to reach the builder population than anticipated, despite having personal contacts with the Colorado Home Builders Association and some local chapters. We spent significant time calling and emailing building companies, which resulted in a few builder representatives in two of the workshops (Loveland and Castle Rock). Interest from this community was strongest at the Loveland workshop, indicating the importance of this topic in that region.

We also spent significant time conducting outreach on the West Slope, and through those conversations learned that this topic is not of major interest. Despite that, we had a reasonable turn-out and excellent discussion with those who attended.

## II. Workshop Execution

Three Tap Fee Workshop were conducted in the fall of 2016:

- **October 19, Glenwood Springs** - Glenwood Hot Springs
- **October 28, Loveland** - The Ranch, Larimer County Fairground and Events Complex
- **November 4, Castle Rock** – Castle Rock Water

The average number of attendees was about 25 people per workshop, meeting our target of gathering 20-40 participants at each workshop. Attendance at the Glenwood Springs workshop was notably smaller than the other two; though this was anticipated because it was clear from our conversations during the outreach effort that tap fee-related issues are not as pressing as on the West Slope as they are on the Front Range.

The majority of workshop attendees were from water utilities, with the balance comprised of municipal planners, consultants, and builder/developers. A detailed list of attendees (and outreach conducted) is attached.

All three workshops ran smoothly and on schedule, and included a mix of presentations and work-group discussions. The agendas for each workshop are attached.

Obstacles

It was difficult to get the builder community to attend the workshops; however those who did attend were very engaged and contributed productively. There were no builders/developers in Glenwood Springs, four in Loveland, and two in Castle Rock. Only the Castle Rock workshop had a “Builder Panel” session, though the original plan was to have one at every workshop. In Loveland, there was not enough interest to have a panel, though the participants were very vocal and engaged throughout the day.

## III. Analysis of Workshops Outputs and Participant Feedback

Notes from each workshop are attached and have been sent to all participants. Several common themes emerged from the three workshops, underscoring their relevance statewide:

- Calculation Methodology (i.e., how to determine tap fee costs) was the topic of most interest and generated the most discussion among participants in all workshops. Participants expressed their need and desire for more formal education on this topic. Specifically, the following issue areas were of most interest:
    - Systematic asset management & inventory
    - Standard operating procedures (methodology/BMPs/templates) for fee calculation and for consistent data management
    - Well-defined, repeatable and efficient process to revise tap fees annually
    - Transparent and defensible methodology
    - Correlation with water demand/usage

- Improving transparency and trust between stakeholders that are affected by tap fees was also a major theme that came up in all three workshops. Specifically:
    - Better education of water boards, city councils, developers, and citizens regarding the need and reasons for tap fees
    - Better data and communication processes, readily accessible and sharable

At the end of each workshop participants filled out a 4-question survey reviewing the day and suggesting next steps. Popular responses are summarized below.

1. What was valuable to you in this workshop?
    - *Top Responses: Interacting with and learning from other communities and stakeholders; hearing from diverse perspectives; hearing about case studies*
2. What changes would you make to improve the workshop?
    - *Top Responses: Nothing, it was great; more presentations; more formal education; more builders/developers in attendance*
3. If you wanted to continue the dialogue on tap fee-related topics among peers and experts, what would be your preferred venue: (circle all that apply)
    - In-person get-together to meet with other practitioners (31)
    - Trainings on specific topics in person (24) or via webinar (23)
    - Email listserv for discussing topics (21)
    - On-line community forum (16)
    - Other: *round table discussions*

4. What tap fee-related topics would you like to learn more about?
    - *Top Responses: Integrating water conservation into tap fees; basic calculation methodologies; legal issues; infrastructure investments*

## IV. Next Steps

Based on the workshop discussions and participant feedback, there is clear desire (particularly on the Front Range) for additional education in tap fee methodology - including conservation-oriented tap fees - and in improving communication with stakeholders to be conducted via webinar or in-person trainings. We recommend that the CWCB consider tap fees as a viable option for helping to reduce water demands in new development to help achieve the 400,000AF conservation goal. There is more work to do in advancing calculation methods, and that is a critical next step in advancing the dialogue on conservation and tap fees.

Western Resource Advocates is interested in pursuing an advanced training on calculation methodologies in collaboration with another institution, such as AWWA. We are also interested in the development of best practices related to both calculation methodology and external communications. We welcome ideas from the CWCB regarding these ideas, or any future support the CWCB may be able to provide to advance these goals.

We are also already in the process of developing more relationships in the builder/developer sector that we will use in the development of a printed guide that describes what communities can do to encourage more developers to build water efficient homes.

**RSVPs and Attendees at Tap Fee Workshops**

**Glenwood Springs**

| Entity | Person | RSVP | Attended? | Title |
|---|---|---|---|---|
| | RSVP Total | 19 | 13 | |
| Eagle River Water & Sanitation District | John McCaulley | Yes | No | Customer and Metering Service Manager. |
| Glenwood Springs | Gretchen Ricehill | Yes | No | Senior Planner |
| Town of Fraser | Jeff Durbin | Yes | No | Town Manager |
| Silt | Janet Aluise | Yes | No | Community Development Director |
| Town of Eagle | Kevin Sharkey | Yes | No | Assistant Town Engineer |
| Eagle River Water & Sanitation District | Jason Cowles | Yes | Yes | Engineer and the Supervisor of our planning group |
| Eagle River Water & Sanitation District | Elena Jones | Yes | Yes | Utility Billing Accountant |
| City of Aspen | Steve Wilson | Yes | Yes | Plans Reviewer, Engineering Department |
| Glenwood Springs | Trent Hyatt | Yes | Yes | Planner II |
| Town of Red Cliff | Barb Smith | Yes | Yes | Administrator & Clerk |
| New Castle | Tim Cain | Yes | Yes | Town Planner |
| Rifle | Nathan Lindquist | Yes | Yes | Planning Director |
| Salida | David Lady | Yes | Yes | PE |
| Carbondale | Mark O'Meara | Yes | Yes | Utility Director |
| SGM Engineering Firm | Louis Meyer | Yes | Yes | |
| SGM Engineering Firm | Grant Crist | Yes | Yes | |
| SGM Engineering Firm | Bailey Leppek | Yes | Yes | |
| Water Research Foundation | Jonathan Cuppett | Yes | Yes | |
| Breckenridge | Laura Lynch | No | | Water Division Manager |
| Breckenridge | Joanie Brewster | No | | Administrative Services Coordinator |
| Breckenridge | Chris K | No | | Sustainable Breck Report |
| Ute WCD | Joe Burtard | No | | External Affairs Manager |
| Eagle River Water & Sanitation District | Maureen Egan | No | | |
| City of Aspen | David Hornbacher | No | | Director of Utilities and Environmental Initiatives |
| City of Aspen | Lee Ledesma | No | | Utilities Finance and Administrative Services Manager |

| | | | | |
|---|---|---|---|---|
| Citizen | Oni Butterfly | No | | Former Ground Water Section Chief EPA Region II |
| Eagle River Watershed Council | Holly Loff | No | | Executive Director |
| SGM Engineering Firm | Chris Lehrman | Yes | | |

**Loveland**

| Entity | Person | RSVP | Attended? | Title |
|---|---|---|---|---|
| | RSVP Total | 46 | 35 | |
| Journey Homes | Andrew Gerk | Yes | Yes | J.D./MBA |
| North Table Mountain Water | Bart Sperry | Yes | Yes | District Manager/Engineer |
| Longmont | Becky Doyle | Yes | Yes | Rate Analyst |
| Fort Collins- Loveland Water District | Bill Dieterich | Yes | Yes | Boardmember |
| Northern Water | Brad Wind | Yes | Yes | Deputy Manager, Operations Division |
| Westmark Homes Colorado LLC | Brandon Myers | Yes | Yes | Co-Principal |
| Fort Collins | Carol Webb | Yes | Yes | Water Resources and Treatment Operations Manager |
| Fort Collins- Loveland Water District | Chris Matkins | Yes | Yes | General Manager |
| Louisville | Cory Peterson | Yes | Yes | Water Resource Engineer |
| Lochbuie | Dave Ott | Yes | Yes | Town Trustee |
| St. Charles Mesa Water District | **David K. Simpson** | Yes | Yes | District Manager |
| Fort Collins | Donnie Dustin | Yes | Yes | Water Resources Manager |
| J U B Engineers | Doug Paull | Yes | Yes | Engineer |
| Water Research Foundation | Freank Blaha | Yes | Yes | |
| HBA of Northern Colorado | Gregory A. Miedema | Yes | Yes | Executive Officer |
| Fort Collins | Heather McDowell | Yes | Yes | PE |
| Fort Collins | Jill White | Yes | Yes | Utility Fee/Rate Specialist |
| Fort Collins | Joni Crist | Yes | Yes | Utility Fee/Rate Specialist |
| Brighton | Karl Gannon | Yes | Yes | Utilities Finance Analyst |

| | | | | |
|---|---|---|---|---|
| Fort Collins- Loveland Water District | Kathy Hawkins | Yes | Yes | District Controller / Business Office Manager |
| Northern Water | Katie Melander | Yes | Yes | Water Resources Engineer |
| Morgan County Water Distict | Kent PFlager | Yes | Yes | General Manager |
| Fort Collins | Liesel Hans | Yes | Yes | Water Conservation Manager |
| Loveland | Michelle Erickson | Yes | Yes | Technical Specialist |
| Little Thompson Water District | Nancy Koch | Yes | Yes | Water Resources Manager |
| Fort Collins | Renee Davis | Yes | Yes | |
| Ft Collins Water Utility | Shane Boyle | Yes | Yes | Water Utility Engineer |
| Northern Water | Sherri Rasmussen | Yes | Yes | Allotment Contract Specialist |
| Northglenn | Sonja Sjholm-Dehaas | Yes | Yes | Water Resources Technician |
| Lochbuie | Steve Stamey | Yes | Yes | Town Administrator |
| Wilson Community Developemnt | Steve Wilson | Yes | Yes | |
| Westminster | Stu Feinglas | Yes | Yes | |
| Northglenn | Tamara Moon | Yes | Yes | Water Resources Administrator |
| Left Hand Water District | Vicki Santos | Yes | Yes | Finance Manager |
| Denver Water | Vincent Gaiter | Yes | Yes | Sales Administration Supervisor |
| St. Vrain Sanitation District | Kevin Feeley | No | | President Board of Directors |
| WONDERLAND HOMES | Kolby O'Herron | no | | Vice President Operations |
| DR Horton | Joe Stifter | Yes | | Land Acquisition |
| Loveland | John Beckstrom | Yes | | |
| Landmark Homes | Jonathan Mosier | Yes | | President |
| Firestone | Julie Pasillas | Yes | | Resources and Sustainability Coordinator |
| Louisville | Kurt Kowar | Yes | | Dir of public works |
| East Larimer County Water District | Melissa Tremelling | Yes | | |
| Wellington | Mike Cummins | Yes | | Finance Director |
| Brighton | Roy Gallea | Yes | | Utility Engineer |
| Brighton | Sarah Borgers | Yes | | Assistant Utilities Director |
| CO HBA | Scott Smith | Yes | | |
| Firestone | Tracy Case | Yes | | Building Development Lead |

**Castle Rock**

| Entity | Person | RSVP | Attended? | Title |
|---|---|---|---|---|
| | RSVP Total | 28 | 26 | |
| Rafetelis | Andrew Rheem | Yes | Yes | Manager |
| Arapahoe County Water and Wastewater Authority | Arnie Reil | Yes | Yes | Development Services Manager |
| TST Infrastructure | Christy Kline | Yes | Yes | Office Manager |
| Aurora Water | Fernando Aranda | Yes | Yes | Rate Analyst |
| Colorado Springs Utilities | Frank Kinder | Yes | Yes | Conservation Specialist, Sr. |
| Colorado Springs Utilities | Jenny Bishop | Yes | Yes | Senior Project Engineer |
| DR Horton | Joe Stifter | Yes | Yes | Land Acquisition |
| Douglas County Libraries | John Beckwith | Yes | Yes | Trustee |
| Centennial Water & Sanitation District | Jon Klassen | Yes | Yes | Water Conservation Coordinator |
| CU Law | Josh Boissevain | Yes | Yes | DU Law Student |
| East Cherry Creek Valley Water & Sanitation District | Justin Blair | Yes | Yes | Engineer |
| Town of Castle Rock | Kevin Elliott | Yes | Yes | Professional Engineer |
| Cherokee Metropolitan District | Kurt C. Schlegel | Yes | Yes | General Manager |
| Colorado Springs Utilities | Kyle Wilson | Yes | Yes | Principal Pricing Analyst |
| Forsgren | Leif Lindhal | Yes | Yes | Sr Engineer/Project Manager |
| Pueblo, Board of Water Works of | Leroy Rittgers | Yes | Yes | Financial Planning and Rate Analyst |
| TST Infrastructure | *Liz Farias* | Yes | Yes | Engineer |
| Aurora Water | Lyle Whitney | Yes | Yes | Water Conservation Manger (UPDATE) |
| Town of Castle Rock | Mark Mantua | Yes | Yes | Plan Review Engineer |
| Castle Rock Water | Mark Marlowe | Yes | Yes | Utilities Director |
| Alamosa | Pat Steenburg | Yes | Yes | Public Works Director/ City Manager |
| Clifton Larson Allen | Patrick Shannon | Yes | Yes | Outsourcing |
| Manitou Springs | Rafael Esparza | Yes | Yes | Water Utilities Foreman |
| CO HBA | Scott Smith | Yes | Yes | CEO |
| Stonegate Village Metropolitan District | Sean Chambers | Yes | No | General Manager |
| Manitou Springs | Shelley Cobau | Yes | No | Public Services Director |
| Centennial Water & Sanitation District | Stephanie Stanley | Yes | Yes | Financial and Budgeting Analysis Manager |

| | | | | |
|---|---|---|---|---|
| Stratton | Wayne Herrick | Yes | Yes | Maintenance Manager of Sewer and Water |

**Tap Fee Workshop Agenda: October 19th**

Glenwood Hot Springs
415 E. 6th Street
Glenwood Springs, CO 81601
Iron Mountain Room

**8:30 – 9:00**
Registration & Networking

**9:00 – 12:00**

1. Welcome and Introductions
2. Tap Fees in your Communities - *In small groups, introduce yourselves and share top priorities related to tap fees. Followed by group report out/discussion.*

Break

3. Presentations about Tap Fees **–** *Presentations, Q&A and discussion about local tap fee structures, administration, and other issues of interest.*
    - Jason Cowles, Eagle River Water and Sanitation District
    - Amelia Nuding, Western Resources Advocates

**12:00 – 1:00** Lunch

**1:00 – 2:30**

4. Breakout group & Discussion - *Based on the top issues raised throughout the day, participants will gather in small groups to workshop the issue of most interest to them.*

**2:30 – 3:00**

5. Networking – Please stay a while for networking, tea and cookies.

**Tap Fee Workshop Agenda – Loveland, October 28th, 2016**

The Ranch
Larimer County Fairground and Events Complex
5280 Arena Circle
Loveland, CO 80538
Thomas McKee Building
Room: Berthoud and Loveland Rooms

**8:30 – 9:00** Registration & Networking

**9:00 – 9:20** Welcome and Introductions

**9:20 – 10:45** Tap Fees in your Communities - *In small groups, introduce yourselves and share top priorities related to tap fees. Followed by group report out/discussion.*

**10:45 – 11:00** Break

**11:00 – 12:30** Community Presentations– *Presentations, Q&A and discussion about local tap fee structures, administration, and other issues of interest.*

- Brad Wind, Deputy Manager, Operations Division, Northern Water
- Nancy Koch, Water Resources Manager, Little Thompson Water District
- Stu Feinglas, Senior Water Resources Analyst, Westminster

**12:30 – 1:30** Lunch (provided to participants)

**1:30 – 3:00** Breakout group & Discussion - *Based on the top issues raised throughout the day, participants will gather in small groups to workshop the issue of most interest to them.*

**Tap Fee Workshop Agenda – Castle Rock, Nov. 4 2016**

175 Kellogg Court
Castle Rock, CO 80109
Building 183 (enter through Gate C)
Room: Utilities Ops Center Meeting Room (second floor)

**8:30 – 9:00** Registration & Networking

**9:00 – 9:20** Welcome and Introductions

**9:20 – 10:45** Tap Fees in your Communities - *In small groups, introduce yourselves and share top priorities related to tap fees. Followed by group report out/discussion.*

**10:45 – 11:00** Break

**11:00 – 12:00** Community Presentations**–** *Presentations, Q&A and discussion about local tap fee structures, administration, and other issues of interest.*

- Mark Marlowe, Utilities Director, Castle Rock Water
- Lyle Whitney, Water Conservation Supervisor, Aurora Water

**12:00 – 1:00** Lunch (provided to participants)

**1:00 – 1:30** Developer/Builder Panel Discussion – *Builders and developers will talk about their experiences, interests and challenges with tap fees in new development projects. Followed by Q&A and discussion.*

- Scott Smith, CEO, Colorado Association of Homebuilders
- Joe Stifter, Land Acquisitions, DR Horton
- Moderator: Andrew Rheem, Manager, Raftelis

**1:30 – 3:00** Breakout group & Discussion - *Based on the top issues raised throughout the day, participants will gather in small groups to workshop the issue of most interest to them.*

Notes from Tap Fee Workshop:
Glenwood Springs, October 19, 2016

**Session I. Tap Fees in your Communities** - *In small groups, participants shared their top priorities related to tap fees.*

Based on small group conversations, the issues raised by participants were grouped into the following six categories (A-F). The number in parenthesis following each category title indicates the number of votes it received when participants were asked to vote on the topic they were most interested in discussing later in the day (Session II).

A. Calculation Methodology (7)

- Tap fee rate structure that charges appropriately for impact of outdoor irrigation
- Rational Nexus
- How to define EQR/SFE Units + following schedule (new uses)
- Method for establishing tap fee
    - EQR Schedule
    - tap size
    - irrigation

B. Infrastructure Funding (CIP) (6)

- Delivery systems covered under tap fee
    - potable
    - raw
    - irrigation
    - reuse
    - storm
- Consistency of tap fee revenues to fund infrastructure
- Long term maintenance/replacement
- Funding to prepare for unknowns
    - failures
    - regulatory
    - hazards
    - economic

C. Redevelopment (4)

- Administration
- Can tap fees be used to incentivize infill development on existing infrastructure?

D. Politics (1)

- Political Balance
    - affordability, low income
- Political influence
- Competition with neighboring communities

E. Demand Planning & Tap Fees (0)

- Conservation
    - link to Land use planning
    - limits on total demand

F. Communication (0)

- Communication:
    - value of water
    - can help
- Transparency

**Session II. Breakout group & Discussion** - *Based on the top issues raised earlier in the day, participants will gather in small groups to workshop the issue of most interest to them.*

<u>Calculation Methodology</u>

Ideal State: Recover Costs 1. fully, 2. fairly and 3. efficiently

1. "Fully"

Barriers to recovering Fully:

- Limited staff resources
- Political interests
- Competing financial priorities (e.g. a change in water rates may affect desire/ability to change tap fees)

Strategies for recovering fully:

- Revise tap fees on a regular basis:
    - annually to adjust for inflation (time value of money realized)
    - when there is a change in a capital plan
    - when there is a change in the master plan
    - when there is a change in regulations

2. "Fairly"

Barriers to recovering Fairly:

- Average numbers (of water demand/use) are never "right", need to align actual numbers with projections
- Lack of good data
- Historical differences in fees (i.e. lack of continuity) creates inequity one region/development to the next
- Remodeled units' tap fees are grandfathered in

Strategies for recovering Fairly:

- Improve data keeping by customer class/development type
- Communication and education to all stakeholders, to improve customer confidence
- Need a well-defined tap credit or fee structure for redevelopment, based on system impact

3. "Efficiently"

Barriers to recovering Efficiently:

- Lack of transparency
- Lack of consistent and accurate records

Strategies for recovering Efficiently

- Consistent, transparent and accurate record keeping
- Well-defined, repeatable efficient process to revise tap fees annually

<u>Infrastructure Funding</u>

Ideal state: Revenue stability for required maintenance of infrastructure, and creating reserve for unknowns and in support of other community goals

Barrier: Politics

- Reluctance to increase fees ("Not in my term of office "NIMTO")

Solutions:

- Remove decision making from political process (e.g. to appointed board)
- Provide good reasons….connect the dots on fiscal health into the future, with accurate info
- Forge external partnerships

Barrier: Legacy/Historical Knowledge

Solutions:

- Systematic asset management & inventory
- Standard operating procedures (BMP)/templates for standardized data: regulated or incentivized
- Get it out of people's heads and on to paper

Barrier: Financial volatility and lack of revenue stability

- Includes macro-economic forces (growth trends)
- Stability of revenues given the unknowns (regulatory/emergency)

Solutions:

- Explore multiple funding sources (alternative funding mechanisms (e.g. insurances))
- Establish healthy reserves

Barrier: Overly optimistic Growth projections

- Affordability of infrastructure with respect to the size of the community

Solution:

- Do your best to be realistic

**Notes from Tap Fee Workshop:**
**Loveland, October 28, 2016**

**Synthesis of Common Themes**

These are the ideal states, barriers and solutions that came up more than once throughout our conversation, and address at least one aspect in the priority issue areas discussed in the afternoon: calculation methodology, utility costs, external communications, and customer cost.

| Ideal State | Barriers | Solutions |
|---|---|---|
| Transparent and defensible | Public Trust & Transparency | Better education – board, developers, citizens |
| | | Improve trust & transparency |
| Charge to customer = cost of service (to utility) | | Better data; share data & processes; easy to find data |
| Based on actual use/impact - including conservation | Differences among water providers | Collaboration between municipalities |
| Better education - explanation of costs | | Uniform requirements/standardized jargon |

These common themes are suggestive of their importance to multiple communities and stakeholders, and of their ability to address multiple, priority issue areas related to tap fees.

**Session I Raw Notes - Tap Fees in your Communities** - *In small groups, participants shared their top priorities related to tap fees.*

Based on small group conversations, the issues raised by participants were grouped into the following seven categories (A-G). The number in parenthesis following each category title indicates the number of votes it received when participants were asked to vote on the topic they were most interested in discussing later in the day (Session II).

A. Calculation Methodology (14)
   - how to charge tap fee if excess capacity exists

- how to structure fees for redevelopment
- structuring tap fees based on actual cost
    - Is this method hard on some businesses (e.g. small businesses?)
    - How do you factor in high consumption businesses? e.g. breweries/laundromats
    - What different methods are there for determining fees?

B. Utility cost (6)
- Intergovernmental agreements to reduce costs
- how to charge tap fee if excess capacity exists
- Cost considerations to: district/utility, developer and affordability
- [what will] Post CBT water rights environment [be like]

C. External communications (3)
- Need a wide overview and general background on water fees and their ramifications
- How to communicate simply and clearly what tap fees pay for
- Educating public that water supply systems are different between different communities

D. Calculation Methods (14)
- defensible, transparent fee calculations
- water tap fees if excess capacity
- structuring fees on actual costs
- What are the best methods for determining tap fees (including best practices) to create a defensible rate structure?
- How to structure tap fees for redevelopment?
    - conservation focused
    - incorporating existing infrastructure
    - how does new development impact supply and treatment

E. Customer Cost (4)
- Accommodating residential sprinklers w/o penalties w/ costs
- Equity: across customers, existing vs new, types
- water tap fees if excess capacity
- defensible “cost of service” and transparent
- affordable housing: “cost of service,” who covers “subsidy”

F. Water Conservation (2)
- How do you ensure a one-time incentive reflects future use?
- conservation/water allotment and surcharge
- planning for less water use than actually occurs
- How can tap fees help achieve conservation goals?
    - sizing based on fixture size and number
    - rates to support water resources
    - irrigation tap fees

G. Administration

- simplicity, implementation ease
- scalable/explainable and equitable
    - increased scalability = decreased simplicity
    - How to administer?
    - how to include administration and implementers – education of staff and system limitation
    - ability to keep analysis simple, for future updates

**Session II Raw Notes - Breakout group & Discussion** - *Based on the top issues raised in Session I, participants gathered in small groups to workshop the issue of most interest to them.*

A. Calculation Methods Group 1

Ideal State:

- Equitable to all rate classes
- transparent and defensible
- based on an actual impact
- simple calculation, easy to explain
- easy to understand the concept behind the calculation method
- common calculation methods employed

Barriers:

- Difficult to break out all the usage profiles
- More resolution creates a difficulty to manage the data
- Complexity
- Time element of when you buy into the system
- Getting consensus and buy-in on what needs to be done
- Service Providers without influence on land use or knowledge changes
- Financing the upgrades
- Gaining support for the upgrades

Solutions:

- Include in the calculation:
    - irrigated areas
    - type of irrigation (e.g. hydrozone)
    - plumbing fixture counts (type of fixtures, low use)
    - size of meter
    - dwelling unit size
    - usage
- Create a conserving class and if the owner goes over they pay the difference in overages

- Developer has to show that the efficiencies are in place to get the conserving class.
- Update all the fees at certain, regular time frame (fairly frequently)
- Billing system and financial model need to be robust enough to capture the changes and flag accounts over the allotments

A. Calculation Methods Group 2

Ideal State:

- Equitable – keep utility whole
- Simple – message same for everyone
- Logical – easy to explain
- Tools – to be easy to calculate
- scalable
- Based on actual use (benefit to large house on a small lot, less irrigable area)
- Conservation controls built in

Barriers:

- Differences in vertical integration
- time limitations to be in loop
- staff
- money
- politics – acceptance of staff's recommendations by board/council
- accuracy….simplicity = at odds (this is complex question)
- Out cost/price yourself (drive away customers)
- lag time – between when fees set vs. when development put online

Solutions:

- standardized jargon
- documentation of inventory that used to calculate fee
- look forward, be good stewards to the future
- Education – Board, developers, citizens
- Data and process sharing
- Policy in place – for long term consistency
- collaboration between municipalities

B. Cost to Utility

Ideal State:

- Full cost to utility would be passed on to end user proportionate to use
- Efficiency (*I believe this refers to water efficiency, but possibly it's efficiency in administering fees?*)

Barriers:

- Building infrastructure (large front end cost, up-front costs) for future needs or incremental cost burden or inability to (*pay?*)
- Limited resources
- "justified subsidies"
- efficiency

Solutions:

- better data – real time
- Education
- dual use systems
- Trust

C. External communications

Ideal State:

- Open communication
- Everyone affected by changes in rates and fees is aware of the changes, understands what they're for, etc.
- Education

Barriers:

- Generational communication methods
- Needs are different in every community
- Invisible infrastructure – taken for granted
- Limited public understanding of the issues (e.g. cost of water rights)
- Public trust
- Government Regulation
    - interplay of fed and state
    - local response
- Intergenerational issues w/ long asset lives
- value of water - communication

Solutions:

- Use existing networks to disseminate information
- know your audience
- Make it easy to find information (e.g. water rights)
- develop resources on education regarding interplay of rates and fees
- have public information staff attend events
- Email, social media, website – use tools to make info available
- be part of the general public discussion
- be open to many methods and solutions
- gaining public trust through transparency

E. Customer Costs

Ideal State:

- Charge = cost of service
- better explanation of what you're buying and what new customers and existing customers pay
- better explanation
- water is not a factor in price or location of home

Barriers:

- Cost of raw water increasing
- differences in age/portfolios/requirements
- water law constraints
- affordable housing
    - kicked the can

Solutions:

- Easing legal barriers to sharing water
- complete revision of water law
- better education
- uniform requirements

**Notes from Tap Fee Workshop:**
**Castle Rock, November 4, 2016**

**Synthesis of Common Themes**

The following "ideal states, barriers and solutions" were identified more than once throughout our conversation, and they address at least one aspect in the priority issue areas discussed in the afternoon. These common themes are suggestive of their importance to multiple communities and stakeholders, and of their ability to address more than one priority issue area related to tap fees.

| Ideal State | Barriers | Solutions |
|---|---|---|
| Fees are correlated with water demand/usage | Administrative costs<br>Political systems | Standardized methodology/best practices |
| | Lack of predictability (of fees and external influencing factors) | Transparency to builders & home buyers via fee structure and education |

**Session I Raw Notes - Tap Fees in your Communities** - *In small groups, participants shared their top priorities related to tap fees.*

Based on small group conversations, the issues raised by participants were grouped into the following five categories (A-E). The number in parentheses following the category title indicates the number of votes it received when participants were asked to vote on the topic they were most interested in discussing later in the day (Session II).

A. Tap Fee Calculation (10+)
   - Equity of fees: Residential vs. Commercial
   - How can tap fees help with being able to supply water for the community and pay for renewable water supplies?
   - Are tap fees adequately designed to appropriately recapture capital costs?
   - Adapting to development/market trends
   - What are collected tap fees used for? (e.g. water supply, capital recovery, O&M)
   - How to balance fees/rates to recover costs and encourage development?

B. Water Conservation (6)
   - What incentives are there for developers? What efforts have been made to determine interest?
   - How are organizations using tap fee to promote conservation?
   - How to structure and implement a conservation tap fee?

C. Affordable Housing (3)
   - How do we manage tap fees to allow for affordable housing?
   - Affordability impact on development

D. Education (0)
   - How to provide tools and educate developers on tap fees and regulations?
   - How do we educate the public about their tap fees?
   - How do utilities educate governing bodies on the need for rate increases or convince them of the need for this?

E. Inter-departmental (or entity) coordination (0)
   - What is the connection between city planning/zoning and utilities and tap fee development?

**Session II Raw Notes - Breakout group & Discussion** - *Based on the top issues raised in Session I, participants gathered in small groups to workshop the issue of most interest to them.*

A. <u>Tap Fee Calculation</u>

Ideal State:

a) Equal distribution of capital risks
   - Between utilities, developer and customers
   - Risk of timing of development

b) National methodology for tap fee development
   - What can be included in the tap fee
   - Standardization

c) Charge per capacity/usage rate
   - Based on projected demand

d) Should go to:
   - Reinvest in current system and new load on system
   - Invest in future capital investment to build and secure supply
   - Reimburse current customers for use of system

e) Strong connection between the tap fee and rate development

Barriers:

a) Very difficult to predict risks – so many unknowns e.g. economic downturn, climate, acts of god, growth, political

b) How would everyone agree to one methodology? Every area is <u>so</u> different, has different goals and needs, and political will.

c) Unknown how long that projected use is accurate. How to account for redevelopment of area that has already paid tap fee?
d) Timing of investments – how to calculate?
e) How to equitably apportion fees to maintain and develop infrastructure and supply.

Solutions:

- Perhaps have industry standards/best practices.
- Build tap fee structure and review frequently, but also be reliable.
- Cost of service – review frequently.
- Potential redevelopment fees to address changes in use.

B. <u>Water conservation Incentives in tap fee structures/rates</u>

Ideal State:

- Tap fees that truly represent water use on a site. These tap fees represent both indoor and outdoor use and encourage water efficiency. Likewise, fees become punitive with higher assumed water use.

Barriers:

a) Political systems
b) Administrative costs
c) Lack of education and outreach/buy-in
d) People's aesthetic values – blue grass is valued
e) Standardized cost for residential development

Solutions:

a) Develop a regional committee to develop standardized methodology to develop a tap fee structure (best practice guide)
b) Develop fees to account for needed admin effort, but overall reduction of fee for developers due to lower-water-use- landscape.
c) Push reductions so developers are aware. Develop marketing to help developers sell idea to buyers.
d) Develop education and outreach to combat "social status" of bluegrass.
e) Offer reductions based on landscape type installed and expected water savings.

C. Affordable Housing

Note: “Affordable housing” here refers to making home prices more affordable in general, and is not specifically referring to low income housing.

Ideal State:

- Demand based fees are simplified and stabilized.

Barriers:

- Administration of demand based fees
    - stabilization of rates/fees
    - predictability
- Lack of planning by jurisdictions

Solutions:

- Distinct water fees with mortgage (transparency to home buyer)
- Dual water systems (potable and non-potable), charge for different water sources