State Engineer’s Office
Compact Compliance Strategy
Colorado River Basin

Mesa State of the River; May 20, 2020

Kevin Rein, P.E., State Engineer
Division of Water Resources
Understand Compact Compliance Strategy

Some Components of the State Engineer’s Efforts on Compact Compliance Strategy

Measurement Rules
Gather Information: Feasibility Studies, Data, Workgroup Strategies
Administer Demand Management Water
Administer Aug Plans, Changes, Other
Develop Compact Administration Rules
Implement Compact Administration

Timeline
Understand Compact Compliance Strategy

- Measurement Rules
- Gather Information: Feasibility Studies, Data, Workgroup Strategies
- Administer Demand Water Management
- Administer Aug Plans, Changes, Other
- Develop Compact Administration Rules
- Implement Compact Administration
Understand Compact Compliance Strategy
Understand Compact Compliance Strategy

Why are we talking about a Compact *Compliance Strategy* instead of Compact *Curtailment*?

- *A discussion about curtailment only: Common assumption*
  - If and when Colorado is “out of compliance,”
  - the State and Division Engineers need *only* curtail water use according to priority of appropriation,
  - Colorado will then again be “in compliance,”
- The actual discussion, and potential course of action is more complex
Understand Compact Compliance Strategy

Upper Colorado River Compact (Article IV)?

a) “In the event curtailment...shall become necessary...
b) “…the extent of curtailment ...shall be in such quantities and at such times as shall be determined by the commission…”
c) “...the extent of curtailment by each state...shall be such as to result in the delivery…”
Understand Compact Compliance Strategy

- State Engineer’s actions are part of a Strategy, not simple Curtailment based on priority administration
- Multi-faceted, holistic approach that addresses a), b), and c),
  a) What is the strategy before and after the “In the event...” condition is met?
  b) How does direction from the UCRC influence the strategy?
  c) How does Colorado’s latitude influence, actually, form the strategy?
Understand Compact Compliance Strategy

- Consider the South Platte River Compact:
  - Flows at Julesburg less than 120 cfs, April 1 - October 15?
  - **Curtail** all diversions in WD 64 junior to June 14, 1897
  - Colorado is in compliance
  - Colorado does not take any special actions before compliance becomes an issue
Understand Compact Compliance Strategy

• Consider the Colorado River Compact:
  ▪ The states of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years...
  ▪ That is the recognized (Upper Basin States’) standard for maintaining compact compliance,
  ▪ What is compliance? How do we maintain it?
What Influences Compact Compliance Strategy?

- What influences Compact Compliance Strategy?
  - Probability that based on UCRC determination, Colorado would need to take action and implement Compact Administration,
  - The appropriate approach,
  - Implement Compact Administration as a part of Compact Compliance Strategy.
What Influences Compact Compliance Strategy?

- What influences Compact Compliance Strategy?
  - Probability that based on UCRC determination, Colorado would need to take action and implement Compact Administration,
  - The appropriate approach,
  - Implement Compact Administration as a part of Compact Compliance Strategy.
### Probability of need to take action, Compact Administration

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Lee Ferry Flow (ac-ft)</th>
<th>Ten-Year Total (ac-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9,534,000</td>
<td>90,829,000</td>
</tr>
<tr>
<td>2013</td>
<td>8,289,000</td>
<td>90,746,000</td>
</tr>
<tr>
<td>2014</td>
<td>7,590,000</td>
<td>89,988,000</td>
</tr>
<tr>
<td>2015</td>
<td>9,157,000</td>
<td>90,750,000</td>
</tr>
<tr>
<td>2016</td>
<td>9,138,000</td>
<td>91,380,000</td>
</tr>
<tr>
<td>2017</td>
<td>9,175,000</td>
<td>92,133,000</td>
</tr>
<tr>
<td>2018</td>
<td>9,171,000</td>
<td>92,124,000</td>
</tr>
</tbody>
</table>
Probability of need to take action, Compact Administration
Probability of need to take action, Compact Administration

- **2017-2018 Actual Totals**
- **2019-2021; Current projection, November 2019 24-Month Study**
- **2022-2025; Minimum release under ’07 Guidelines = 7,000,000 acre-feet**
- Acknowledge Mexico “obligation”
- Consider 150,000 ac-ft gain in river, Powell to Lee Ferry

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Lee Ferry Flow (ac-ft) (Year Ending September 30)</th>
<th>Ten-Year Total (ac-ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>9,175,000</td>
<td>92,133,000</td>
</tr>
<tr>
<td>2018</td>
<td>9,171,000</td>
<td>92,124,000</td>
</tr>
<tr>
<td>2019</td>
<td>9,150,000</td>
<td>92,867,000</td>
</tr>
<tr>
<td>2020</td>
<td>8,380,000</td>
<td>92,811,000</td>
</tr>
<tr>
<td>2021</td>
<td>9,150,000</td>
<td>88,734,000</td>
</tr>
<tr>
<td>2022</td>
<td>7,150,000</td>
<td>86,350,000</td>
</tr>
<tr>
<td>2023</td>
<td>7,150,000</td>
<td>85,211,000</td>
</tr>
<tr>
<td>2024</td>
<td>7,150,000</td>
<td>84,771,000</td>
</tr>
<tr>
<td>2025</td>
<td>7,150,000</td>
<td>82,764,000</td>
</tr>
</tbody>
</table>
Probability of need to take action, Compact Administration
What Influences Compact Compliance Strategy?

• What influences Compact Compliance Strategy?
  ▪ Probability that based on UCRC determination, Colorado would need to take action and implement Compact Administration,
  ▪ The appropriate approach,
  ▪ Implement Compact Administration as a part of Compact Compliance Strategy.
What Influences Compact Compliance Strategy?

• The appropriate approach;
  ▪ Priority administration? Curtail across the Colorado River Basin, according to an identified priority date?
  ▪ Acquire relevant information, data, rules?
What Influences Compact Compliance Strategy?

- The appropriate approach;
  - Simple priority administration, by itself, may not be enough. Why?
  - Use available information, data, rules?
What Influences Compact Compliance Strategy?

• The appropriate approach
  ▪ Simple priority administration? Can we do more?
  ▪ Use available information, data, rules?
    o Informed, contemplated, more precise,
    o Stakeholder involvement,
    o Allows for planning, develop options,
    o Acknowledge legal concerns,
    o Priority of a water right is still a critical consideration.
What Influences Compact Compliance Strategy?

- Use available information, data, rules?
  - Compact Compliance Study,
  - Renegotiation of ’07 Guidelines,
  - Data (Measurement Rules),
  - Demand Management (consider the outcome of the workgroups),
  - Compact Administration Rules.
What Influences Compact Compliance Strategy?

- Use available information, data, rules?
  - Compact Compliance Study,
  - Renegotiation of ’07 Guidelines,
  - Data (Measurement Rules),
  - Demand Management (consider the outcome of the workgroups),
  - Compact Administration Rules.
What Influences Compact Compliance Strategy?

• Why Measurement Rules?
  - Consider administration in other basins,
  - Data is critical; accuracy is critical,
  - Consider as an important first step,
  - What would Measurement Rules entail?
What Influences Compact Compliance Strategy?

- Components of Measurement Rules
  - Statutory Authority (section 37-84-112, C.R.S.)
  - Objective, Scope, Applicability,
  - Definitions
  - Measurement Methods, Functional Standards
  - Reporting
  - Enforcement
Components of Measurement Rules

- Statutory Authority (section 37-84-112, C.R.S.)
  - “(1) The owners of any irrigation ditch...shall erect where necessary...proper measuring flumes, weirs, and devices...”
  - Understand “...where necessary...”
Components of Measurement Rules

• Going forward (one plan, **dependent on the ability to travel and gather**)
  - Informal outreach by State Engineer’s Office
    - Spring, Summer 2020
  - Informal stakeholder, gathering information and input
    - Late 2020 (How to reach people?)
  - Initiate Rulemaking
    - 2021
    - Formal stakeholder meetings
    - Draft Rules
    - Initiate formal rulemaking; SEO authority? APA?
What Influences Compact Compliance Strategy?

• Use available information, data, rules?
  ▪ Compact Compliance Study,
  ▪ Renegotiation of ’07 Guidelines,
  ▪ Data (Measurement Rules),
  ▪ Demand Management (consider the outcome of the workgroups),
  ▪ Compact Administration Rules.
What Influences Compact Compliance Strategy?

- What could Compact Administration Rules look like?
  - Guide the State Engineer in Compact Administration
    - Define process
    - Acknowledge UCRC and its role, interaction with UCRC
    - Monitoring methodology
    - Guidance on strict application of priority
    - Guidance on enforcement
    - Consider “Present Perfected Rights,” how that influences administration
    - Mechanisms for allowing diversion by water rights that would otherwise be curtailed
What Influences Compact Compliance Strategy?

What influences Compact Compliance Strategy?

- Probability that based on UCRC determination, Colorado would need to take action and implement Compact Administration,
- The appropriate approach,
- Implement Compact Administration as a part of Compact Compliance Strategy.
What Influences Compact Compliance Strategy?

• Implement Compact Administration;
  ▪ Certain direction from UCRC,
  ▪ Reliable data is available,
  ▪ Certain process if Compact Administration Rules are developed,
  ▪ Precise, focus to maintain compliance while avoiding over-delivery.
Current Activity of the State Engineer’s Office

• The need for Compact Administration is not imminent

Then why all this activity right now?
Current Activity of the State Engineer’s Office

• Then why all this activity right now?
  ▪ Drought Contingency Plan; why?
  ▪ Demand management; why?
  ▪ Measurement Rules, why?
  ▪ Compact Administration; why not?
    o A final plan for Compact Administration now is not helpful
      • Not needed now, too much information is pending
    o However, understanding the scope of a Compact Compliance Strategy now is important to other activities
Current Activity of the State Engineer’s Office

- The need for Compact Administration is not imminent
- Begin with Basin Measurement Rules, upcoming outreach
- Refine our understanding:
  - Coordination with CWCB and UCRC
  - Scope of a Compact Compliance Strategy
  - Available Tools
  - Investigate and Plan: Scope and Process for Rulemaking; Structure of Rules
- Incorporate this information into a Compact Compliance Strategy; communicate with Colorado stakeholders