Water Resources Consulting – My Two CFS Worth

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Presentation Outline

• My Background
• Consulting vs “Other” Career Opportunities
• Large vs Small Consulting Firms
• Wilson Water Group Awesome Projects
• What We Look for When Hiring
• Preparing for Leadership
• Questions?
Consulting vs “Others”

Others include... Federal/State/Local Entities; Conservation Districts; Project-based Large Firms

- Others work on Projects; Consultants work for Clients
- Others build Projects; Consultants build Relationships
- Others may be able focus on research; Consultants have to get the job done
- Others become experts on their organizations water issues; Consultants have to understand both their clients’ water issues and other issues that affect them

Consulting - Big Firms vs Small Firms

- **Big Firms** provide more Project Variety – both in terms of discipline and location
- **Big Firms** favor/train Generalists, **Small Firms** favor/train Experts
- **Big Firms** allow more Portability of Skills than **Small Firms**
- **Big Firms** offer Project Management and Technical tracks, **Small Firms** expect staff to do both
WWG - General Types of Projects

- Water Rights and Litigation Support
- Water Rights Allocation Modeling
- Stakeholder Group Cooperative Project Management (related to water issues)
- Interstate Compact Studies

Water Rights Litigation/Support

North Platte River Basin-Wide Augmentation Plan
Water Rights Litigation/Support

North Platte River Basin-Wide Augmentation Plan

- Essentially all Water Use is for Agriculture
- Currently no water to support new uses (basin is “over-appropriated”)
- New Opportunities and Threats from Oil/Gas, Lumber Mills

Water Rights Litigation/Support

Animas-La Plata Project
Water Rights Due Diligence
Water Rights Litigation/Support

- Project authorized as part of Tribal Settlements
- Due Diligence Litigation – project downscaling resulted in water right being held by entity that is not a project participant
- Project litigation includes 2 States, 3 Tribes, and 2 Municipal Providers, Reclamation
- Three-week Trial scheduled for November 2015, settlement discussions continue

Animas-La Plata Project Water Rights Due Diligence

Water Rights Litigation/Support

- Glenwood Springs Boating Course Water Rights
- Coors General Water Rights
- Dolores River Instream Flow Rights
- Arkansas Return Flow/Exchange Case
Water Rights Allocation Modeling

- Investigating Augmentation Needs for Reservoir Sizing
- Incorporating Projected Future Demands
- Using Paleo (Tree-Ring) Hydrology
- Considering Revised Reservoir Operating Criteria
Water Rights Allocation Modeling

- Project Supported the State Water Plan
- Included analysis of future consumptive and non-consumptive needs
- Modeled potential supply options to meet existing and projected shortages
- Strong focus on multi-use projects
Water RightsAllocation Modeling

- North Platte NRD System Modeling (Nebraska)
- South Platte Decision Support System Modeling
- CDSS - Colorado River Model Extension
- San Juan Recovery Program Modeling

Stakeholder Group Cooperative PM

- Eagle River Memorandum of Understanding
• MOU includes West and East Slope Water Interests
  • Eagle River Water & Sanitation District (Vail)
  • Colorado River Water Conservation District
  • Climax Mining Company
  • Colorado Springs and Aurora

• Goal is to find Cooperative Solutions that allow:
  • Phase II of the Homestake Transmountain Diversion Project be developed at some level
  • Compensatory Storage to be built for Eagle River users
  • Monitor Water Quality and Instream Flows
Stakeholder Group Cooperative PM

- **Goal:**
  - Increase precipitation for Ski Areas and high elevation snowpack to enhance water supply to Upper Colorado River Basin

- **Sponsoring Agencies**
  - Winter Park, Breckenridge, Keystone
  - Front Range Water Council
  - Colorado River Water Conservation District
  - Colorado Water Conservation Board
  - Central Arizona Project
  - Southern Nevada Water Authority
  - Metropolitan Water District – California

Central Colorado Weather Modification Program

Piceance Basin Water Quality Repository and Assessment

North Platte Basin Implementation Plan

Eagle River MOU

Upper Colorado Wild & Scenic Rivers Stakeholder Group

Gunnison Basin Implementation Plan

Central Colorado Weather Modification Program
Interstate Compact Studies

- Colorado River Compact Studies
  - Colorado River Supply and Demand Study
  - Upper Colorado River Compliance Planning
  - Upper Colorado River Ag Consumptive Use
  - Pilot System Conservation Study
  - Wyoming Green River Basin Consumptive Use
  - Colorado River Compact Compliance Study
  - Pilot System Conservation Study

- Rio Grande Compact Litigation Support

What We Look For When Hiring

- Water Resources Interest and Related Degrees

- Currently Employees’ Degrees Include:
  - BS Civil Engineering (2)
  - MS Civil Engineering (2)
  - MS Watershed Science (3)
  - BS Environmental Engineering (1)
  - MS Environmental Engineering (1)
  - MS Environmental Studies (1)
  - BS Geology (1)
What We Look For When Hiring

• Clear Interest in Water
  – Class Focus, Internships, Hobbies

• Hard Workers - School/Summer jobs/Volunteer work (regardless if water-related)

• Open to BS or MS
  – BS with 2 years water experience *may* trump MS with no experience
  – Mixed experience with PhDs

• Interns - willingness to do anything

What We Look For When Hiring

• Personality Fit is Key in Consulting
  – Outgoing is a plus, but half are staff consider themselves Introverts - appearing comfortable during the interview is more important
  – Style must fit with current staff team – make sure you have a chance to talk with other junior staff
  – Style must fit with current clients and attorneys – ask about relationships with clients
What We Look For When Hiring

• What Makes a Candidate Stand Out
  – Passionate when talking about specific classes and class projects
  – Able to discuss valuable lessons learned, specifically working with classmates and professors
  – Ask good questions about our projects, team approach, and mentoring/training philosophy
  – Clearly excited about the projects we discuss
  – Grades are not the most important criteria – smart enough to graduate, smart enough to be trained

Preparing for Leadership

• Look for Firms that Value “Giving Back” to the water community
  – Ask if any staff members serve on boards or committees
  – Ask for example workshops and conferences that the company sponsors and attends

• Start Networking Now
  – Attend free events; POND, Basin Roundtable meetings, events with student scholarships
  – Volunteer to help with events (CWC, CWT, CFWE, South Platte Forum)