SWCA

BRIDGING THE GAP:
Guiding Regulators Through Unique Projects Without Conflict

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AGENDA

- Why Interpretation – Not Regulation – Is the Real Challenge
- What's Driving Inconsistency Across Agencies
- The Consultant's Role as Interpreter & Bridge
- Case Study: Heavy Mineral Mining
- Applying Regulatory Flexibility in Practice
- Improving Outcomes – for Agencies, Clients, & the Environment

THE CHALLENGE | WHY THIS HAPPENS

The Reality

- Regulations are complex & evolving
- Projects often fall outside standard patterns
- Interpretation varies across agencies (and districts)

Why Inconsistencies Occur

- High reviewer workload
- Limited training bandwidth
- Staff turnover & loss of institutional knowledge
- Unfamiliar project types

THE CONSULTANT'S ROLE | THE BALANCE

Our Role as Consultants

- Interpreter of regulatory intent
- Educator of project-specific context
- Bridge between agencies & applicants

Balancing Technical & Interpersonal Skills

- Technical mastery
- Empathy for agency perspective
- Strategic communication

CASE STUDIES: GUIDING INTERPRETATION IN PRACTICE

Applying Regulations to Non-Standard Projects

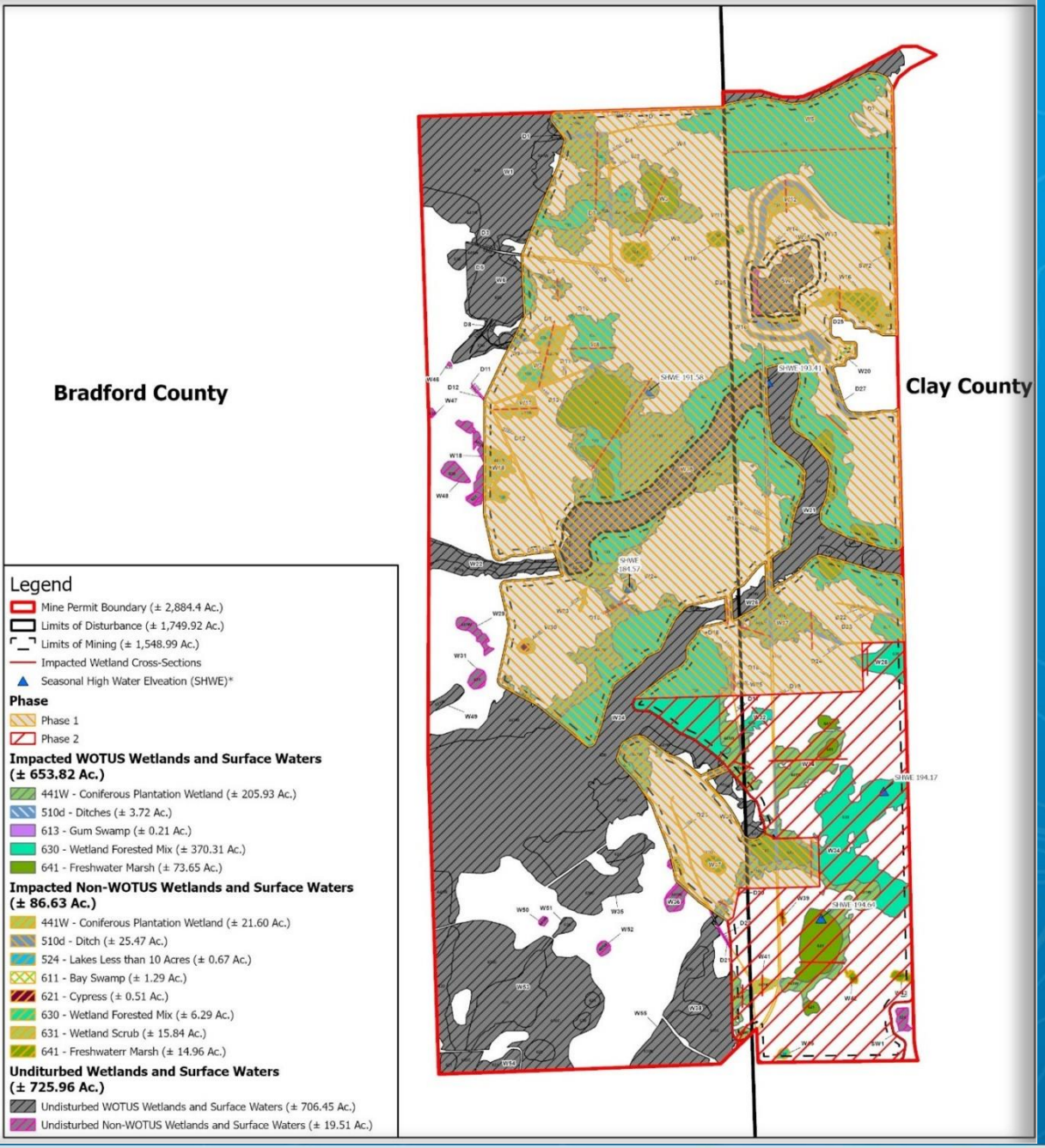
Aligning Interpretation with Regulatory Intent

Using Data & Communication to Reduce Conflict

Case Studies | Heavy Mineral Mining (HMM)

- Wetland Mitigation
- Wetland Jurisdiction
- Water Quality Standards

CASE STUDY 1: WETLAND MITIGATION



USACE 404 PERMITTING

- Multiple Regulatory Transitions (Federal ↔ State)
- Repeated Review of Same Project
- Permitting Spanned 7 Years
  - ✓ USACE review No. 1: 2019 – 2020
  - ✓ State 404 review: 2020 – 2022
  - ✓ USACE review No. 2: 2024 – 2026
- Misapplication of Mitigation Framework
  - ✓ Reclamation vs. Compensatory Mitigation (2008 Rule)

WHAT CHANGED

Guiding Interpretation

- Re-centered on mitigation sequence
- Clarified role of reclamation

Citations (Key Passages)

- 33 CFR 332.1(b): Part 332 (2008 Compensatory Mitigation Rule) does not alter 33 CFR 320.4(r) (general mitigation requirements for DA permits), which describes the mitigation sequence: avoiding, minimizing, rectifying, reducing, and compensating for resources losses.
- 40 CFR 230.75(d): Planning and construction practices to institute habitat development and restoration can be used to minimize adverse impacts and to compensate for destroyed habitat.
- 73 Fed. Reg. 19594 (Apr. 10, 2008): Preamble sections clarify the rule addresses only the compensation component and does not change evaluation of permit applications (including mining) and that environmentally beneficial activities included in a project may reduce required compensatory mitigation.
- 1990 EPA–Army MOA: Confirms the mitigation sequencing and LEPDA (404(b)(1)) analyses precede any consideration of compensation.

WHAT CHANGED

Guiding Interpretation

- Engaged HQ-Level guidance for consistency
- Applied rule as written

Where USACE Application Becomes Misaligned with Regulatory Intent (Observed Patterns)

- Treating compensatory mitigation concepts (e.g., temporal loss, compensation performance standards, long-term management plans, financial assurances, and site protection instruments) as necessary components of avoidance/minimization, rather than limiting application of these concepts to the compensation step of the mitigation sequence.
- Defaulting to compensatory mitigation requirements even when project-integrated reclamation restores aquatic functions, instead of documenting a minimization finding first and then assessing whether any residual losses remain.
- Applying the 2008 Rule to imply that reclamation cannot count toward minimization, despite 40 CFR 230.75(d) allowing habitat development/restoration to minimize adverse effects when part of the project.

OUTCOME

- Permit Issued
- Improved Regulatory Clarity
- Reduced Burden on Future Reviews
- Greater Consistency Across Levels

CASE STUDY 2: WETLAND JURISDICTION

JURISDICTIONAL AUTHORITY

- Constructed Farm Pond (~1970)
- No Historical Connection to Jurisdictional Waters
- Prior USACE AJD (2013): Non-Jurisdictional
- Recent Land Disturbance
- State Jurisdictional Authority Assumed

GUIDING THE PROCESS

Clarifying the Rule through Context

- Historical data re-established site context
  - ✓ Constructed farm pond (1970)
  - ✓ Prior AJD (2013): non-jurisdictional.
  - ✓ Disturbance ≠ change in jurisdiction

Coordinated Discussion with Agencies

- USACE Norfolk District
- Virginia Department of Environmental Quality – Virginia Water Protection Program Regional Manager

OUTCOME

- Non-Jurisdictional Determination Confirmed
- Alignment Between State & Federal Agencies
- Avoided Unnecessary Permitting & Mitigation

CASE STUDY 3: WATER QUALITY STANDARDS

NATURAL SYSTEMS

- Naturally Acidic Blackwater Systems
- Unique Trail Ridge Formation Geochemistry
- Natural Conditions
  - ✓ Iron
  - ✓ Radium
  - ✓ pH
- Regulatory Requirements
  - ✓ Neutral Discharge
  - ✓ Effluent Limitations

THE CONFLICT | IMPACT

Regulatory Conflict

Iron
- Naturally present in intake & effluent

Radium
- Naturally occurring – phase shift, not generation

pH
- Required: pH 6.0 – 8.5 (standard)
- Natural system pH < 6.0
- Regulatory allowance exists – but underutilized.

When Compliance Creates Impact

Iron
- Exceed standards – Interpreted as contamination needing clean up & treatment

Radium
- Exceed standards – Interpreted as contamination needing clean up & treatment

pH
- Episodic shifts from intermittent discharge
- Physiological stress to acid – adapted species
- Deviation from stable natural background

THE APPROACH | TAKEAWAY

Applying Regulatory Flexibility

- Natural background as governing standard
- Site-specific criteria
- Exemption provisions
- Alignment with federal NPDES framework

What This Means

- Aligns standards with natural system conditions
- Reduces unintended environmental impacts
- Improves regulatory consistency & efficiency
- Strengthens regulator-consultant collaboration

CLOSING THOUGHTS | BRIDGING THE GAP

Regulations Provide Flexibility – when Fully Understood

Interpretation Drives Outcomes

Historical Data Reveals True System Conditions

Collaboration Improves Consistency & Efficiency

Better Interpretation → Better Decisions → Better Environmental Outcomes

QUESTIONS?

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