Integrated Wetland and Stormwater Program

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History

• Construction Stormwater located at Department of Natural Resources (DNR) Division of Soils – MOU with IDEM
  – DNR - Inspections and plan review
  – IDEM - NOI issuance and enforcement

• 2005 – Gov. Daniels eliminated DNR Division of Soils
  – Moved program to newly established ISDA which did not want to implement a regulatory program
  – IDEM agreed to take on inspections and plan review

• 2009 – Combined into one section
Current Program Structure

• Surface water section
  – 401 and isolated wetland program
    • Eight project managers
    • Violations, permitting, compliance (cradle to grave)
  – Construction stormwater
    • Five stormwater specialists (+ two regional office inspectors)
  – Industrial stormwater
    • Two stormwater specialists
  – MS4
    • One MS4 coordinator

• Formal enforcement in separate section
Why Integrate?

• Permitting deals with same clientele
  – Large quantity of construction projects need both permits
  – Permitting on different schedules may complicate coordination

• Violations tend to come in pairs
  – Most construction stormwater violations impact water quality

• Violation discovery for both are complaint driven
  – Is there always a need for separate inspections?

• Reports/violations mailed out on different schedules confuses the applicants
Integration Efforts

• Physical location
  – Sit next to each other

• One Section Chief
  – Reviews both reports and ensures conflicting information does not leave agency

• Joint reports
  – Noncompliance letters contain applications for both programs

• Cross training
Construction Stormwater Integration Measures

• Stormwater staff looks for wetlands during inspections
  – Integrated into the inspection form
• Wetland evaluation part of plan review process
• Wetland violations included in noncompliance letters
• Wetland staff carbon copied on reports
401 Integration Measures

- Carbon copy stormwater staff on reports
- Conditions in 401 Certifications
- Erosion and Sediment Control Conditions
  - Implement erosion and sediment control measures on the construction site prior to land disturbance to minimize soil from leaving the site or entering a waterbody. Erosion and sediment control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land-disturbing activities associated with the project. Appropriate measures include, but are not limited to, silt fence, diversions, and sediment traps.
  - Monitor and maintain erosion control measures and devices regularly, especially after rain events, until all soils disturbed by construction activities have been permanently stabilized.
  - Use run-off control measures, including but not limited to diversions and slope drains. These measures are effective for directing and managing run-off to sediment control measures and for preventing direct run-off into waterbodies.
  - Install and make appropriate modifications to erosion and sediment control measures based on current site conditions as construction progresses on the site. The Indiana Stormwater Quality Manual or similar guidance documents are available to assist in the selection of measures that are applicable to individual project sites.
  - Implement appropriate erosion and sediment control measures for all temporary run-arounds, cofferdams, temporary causeways, temporary crossings, or other such structures that are to be constructed within any waters of the state. Minimize disturbance to riparian areas when constructing these structures.
401 Integration Measures

- Stabilize and re-vegetate disturbed soils as final grades are achieved. Initiation of stabilization must occur immediately or at a minimum within the requirements of a construction site run-off permit after work is completed. Use a mixture of herbaceous species beneficial for wildlife or an emergent wetland seed mix wherever possible and appropriate. Tall fescue may only be planted in ditch bottoms and ditch side slopes and must be a low endophyte seed mix.

- Cut and fill slopes located adjacent to wetlands and streams (including encapsulated streams) or that directly discharge to these aquatic features are to be stabilized using rapid/incremental seeding or other appropriate stabilization measures.

- As work progresses, areas void of protective ground cover shall be re-vegetated or stabilized using mulch that is anchored, or under more extreme conditions an appropriate grade of erosion control blanket must be used. Erosion control blanket or other armament shall be used for areas associated with concentrated flow. The selection of material must be made based on site conditions and all applicable permit requirements. If a construction site run-off permit (327 IAC 15-5) has been obtained, implement the stabilization plan as specified in the stormwater pollution prevention plan (SWPPP).

- Stabilize all disturbed areas upon completion of the project.

- If the land disturbance for the overall project will disturb one (1) acre or more a construction site run-off general permit (327 IAC 15-5) is required for the project. Permit coverage must be obtained prior to the initiation of land-disturbing activities. Information related to obtaining permit coverage is available at www.idem.IN.gov/stormwater or by contacting the IDEM, Stormwater Program at 317-233-1864 or via email at Stormwat@idem.IN.gov.
Benefits

- Greater coordination
- Increased awareness
- Double set of eyes for violations
- Faster response times to complaints
- Increased resolution of violations
- Helps regulated community
  - No more he said, she said from regulated community
  - Most times only one noncompliance letter is sent instead of two
- Combined technology integration
  - Environmentally friendly control measures, big picture impacts
- Enforcement cases carry other programs violations
Difficulties

• Staff buy in
  – “Stay in your lane!”
  – Fear about ability to meet job expectations
  – Consistency

• Busy section chief

• MS4 and Soil and Water Conservation Districts (SWCD) wild card

• Larger programs more difficult?
Next Steps

• Modernize
  – Smart phones, tablets, mapping
  – Integrated online application
  – Integrated database with mapping
  – Integrated monitoring report portal
  – Inspection priority system
    • Topo maps, soil types, rain reports, 303(d) lists, wetland maps, etc.

• Green infrastructure
  – Regulatory programs, not engineering division
Case Study

• New terrain Interstate 69
  – Large scale project and land disturbance
  – Construction stormwater coverage and 401 required
  – Major potential for environmental harm

• Construction stormwater conditions in 401

• Stormwater inspector on-site
  – Inspector enforced both sets of conditions
Case Study

• Developer – build lake and cabins
• Wetland, stream, and construction stormwater violations on site
  – Lake = sediment basin?!?
  – Destroy streams for sediment control?!?
  – Use of tree’s root wads for bank stabilization
“...before the programs were combined, I never even thought about construction stormwater.”

– 38-year veteran of the Wetland program
Contact Info

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