

NYSWF Wetland Functional Assessment Workshop

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NYSDEC

Welcome!!

- Consultants?--New York? Elsewhere?
- Academia—Instructors? Students? Other?
- Regulators?--State? Federal? Other?
- Other?—who?
- Instructors: Please rise and introduce yourself, Dave, Kim, and Laura

DEC Survey Results

Most common formal process: New England Dist. COE Highway Methodology

Methods encountered several times: WET; ORAM; HEP

Methods encountered a few times: HGM

Other methods encountered:

- Federal Highway Assessment Method (predecessor to WET);

- Indicator Value Assessment Method (not sure which—could be several);

- Magee Hollands Rapid Procedure for Assessing Wetland Functional Capacity

Where Is Today's Discussion Headed?

Accepted that the (10/93) DEC Mitigation Guidance needs updating, perhaps to include greater emphasis on wetland functional assessment. That effort has started. And stalled. May start again... someday. Likewise, the Corps may benefit from updated guidance.

Through this workshop, the Wetlands Forum would like to facilitate discussion in hopes of arriving at some conclusions helpful to the subject. Perhaps going so far as to eventually publish a guidance manual until such time as the regulators have their own. (If interest is sufficient.)

In the meantime:

- Today we'll discuss a mix of established and developing wetland assessment protocol. To the extent any combination thereof can assist this group with future wetland assessments, our hope is to share some ideas (as a group) on how.
- The idea today is not for me or others to “simply” lecture, but instead to engage you all in a conversation. At the end of the day, we'll regroup to discuss what might work well unto itself, or in combination with other techniques. And where we want to go from here, if anywhere.

What is Wetland Functional Assessment?

An evaluation of the perceived overall quality of a wetland; or perhaps more specifically...

An evaluation of the level at which a wetland is performing a specific function or many functions.

- Footnote: In the “old days” we talked about wetland functions and values. Functions were what wetlands did—their physical, chemical and biological processes, e.g., hold water, provide habitat, sequester nutrients, etc. Values were what wetlands did that people perceived as beneficial—measurements of a wetland’s importance to society, e.g., scientific research potential, recreational opportunities, food production, etc.

Now we hear more about “wetland services”

“Services are defined as the beneficial outcomes of wetland functions, and the value of services depends on the ability of wetlands to satisfy the needs and preferences of people.” (USACE, 2000. Expanding Wetland Assessment Procedures: Linking Indices of Wetland Function with Services and Values)

You may hear me use these terms (plus “wetland benefits”) interchangeably. = My bad.

An assessment should help determine the likelihood that a function (or value or service or benefit) exists or is being performed—usually the more specific the better.

Does this wetland provide for recreation?

Does this wetland provide for boating?

Does this wetland provide for kayaking?

Does this wetland provide for fishing from a kayak?

Better than assessing the likelihood of a function is to assess how well or to what level a function is performed.

How many people access this wetland per year to kayak?

- Qualitative: “Lots of people enjoy coming here to kayak.”
- Quantitative: “On average, 580 people per year spend a total of 1015 hours kayaking within this wetland per year. Their comments include....”

“RAM”

Most functional assessments use a **R**apid **A**ssessment **M**ethod, which provide a generalized assessment using a question/answer method and matrix analyses. Individual functions are more typically measured through surrogates, e.g.:

Kayaking = a potentially hard to measure service.

- (1) Is it an open water or surface water wetland?
- (2) If so, how big and deep is it?
- (3) Does open water portion of wetland have public access?
- (4) Is that access close enough to a road to transport kayak?
- (5) Is the wetland safe for kayaking? (No alligators.)
- (6) ?

Why is Functional Assessment Needed?

- 6NYCRR Part 663.5(e): “A permit, with or without conditions, may be issued for a proposed activity on a wetland of any class or in a wetland's adjacent area, if it is determined that the activity (i) would be compatible with preservation, protection and conservation of the wetland and its benefits, and (ii) would result in no more than insubstantial degradation to, or loss of, any part of the wetland, and (iii) would be compatible with public health and welfare.”
- Wetland functional assessments are used by DEC and the Corps primarily to determine potential affects of a proposed project and the level and type of compensatory mitigation needed. Ye ole, “An eye for an eye, a tooth for a tooth” mentality. Or, with DEC maybe it’s a “2.6 eyes for an eye, and 2.6 teeth for a tooth,” mentality.
- But I think we need to expand beyond figuring out what we’re losing at time of pending loss, and get a better feel for what we have. (To see if it should be an eye for an eye, or perhaps instead, an eye for a tooth.)

Important to be quantitative, not just qualitative?

Is it important to say how many wood ducks may be harvested per year at a wetland?

Or is it good enough to conclude waterfowl hunting should be particularly good at this wetland?

Yes, sometimes.

But the more precise, the less rapid.

- Exactly how many sturgeons are being killed?
- Exactly how many long eared bat trees are being removed?
- How many acre feet of floodwater are being retained?
- Which pollutants are being sequestered?

What's important to DEC?

Objectivity, Consistency, Comprehensibility

We have our biases. Waterfowl hunting anyone?

Or, can you say “resilience”? Biases are not necessarily a good thing.

Important to have formal method so as to not “forget” certain functions, or how to evaluate them consistently from time to time or person to person.

Like Thanksgiving dinner—take a shopping list & use a good recipe.

Your work needs to be all inclusive and easily followed.

Assessment Content:

- What is the intent of the assessment? (Are we on same page to begin with?)
- What was done to reach conclusions? (Methods Section)
- Why was this done? (Justification and rationale for the methods.)
- What are the conclusions? (Results Section)
- Anything out of the ordinary? (Explain oddities or omissions.)

To Conclude ...

Wetland assessment is an important component of regulatory review. Today we'll engage in a dialog about some specifics on various techniques.

It's recognized there is room for improvement to all techniques out there, or modifications needed for different technique applications, e.g. NRCS or NHP approach to a DEC permit.

Perhaps the Wetlands Forum may be a vehicle for furthering guidance on this subject, with your input.

Thanks for your time.

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