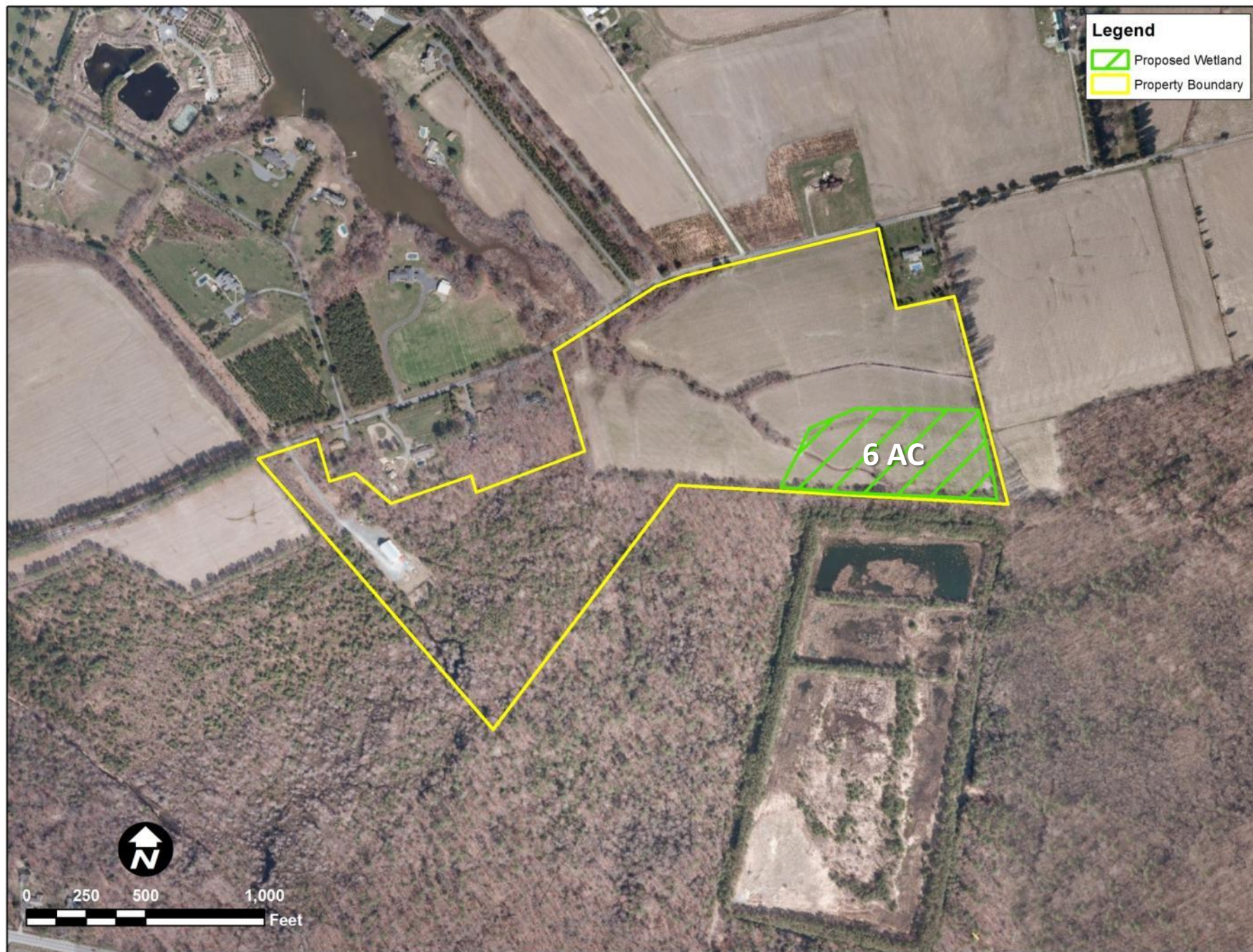
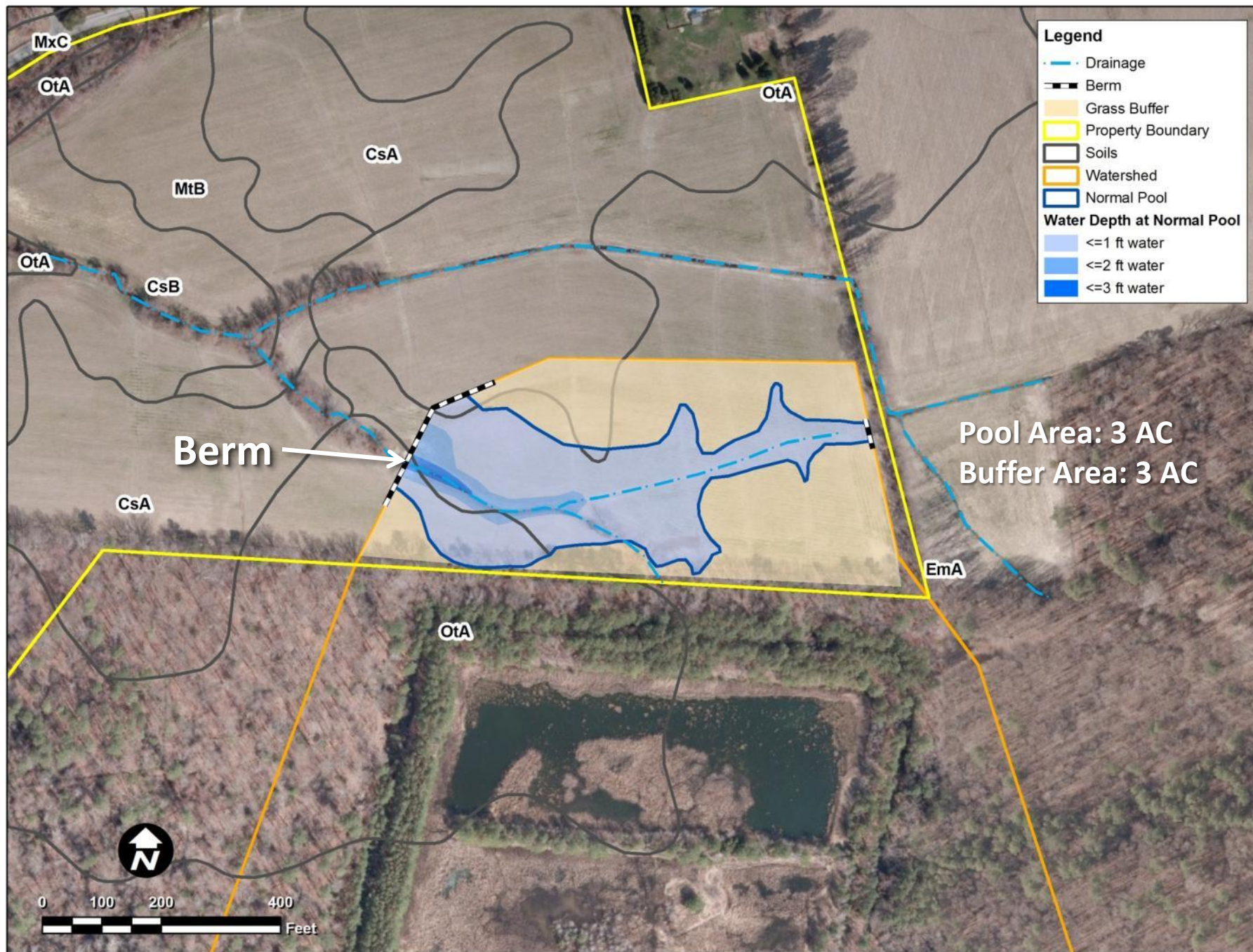


Regulatory Permitting Example from Maryland Eastern Shore

Habitat GIT Meeting
November 28, 2012

Steve Strano
State Biologist
U.S. Department of Agriculture
Natural Resources Conservation Service



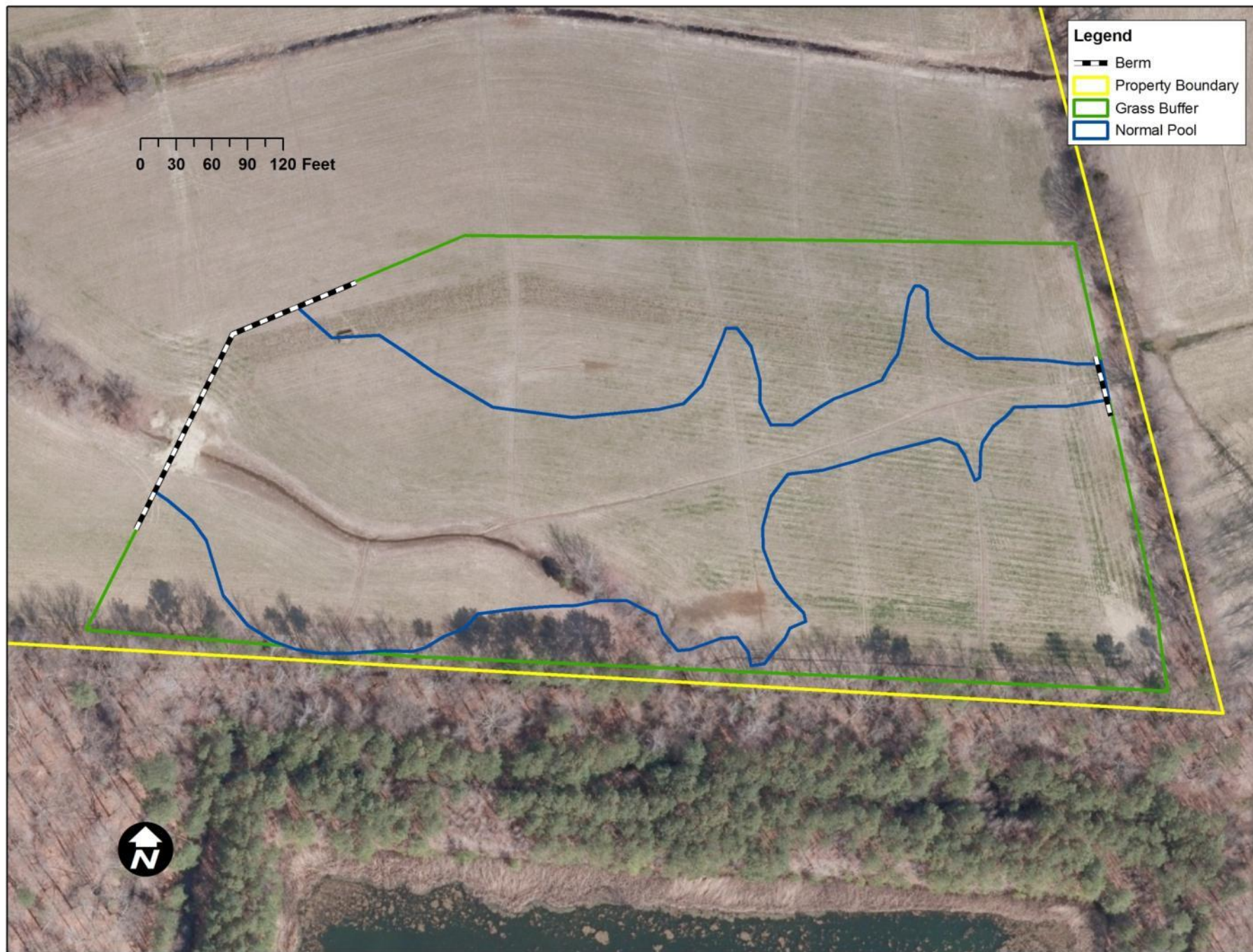


Current Regulatory Vehicles

- Regional Letters of Authorization (RLOAs) under the State's General Waterway Construction Permit (GWCP)
- USACE Nationwide Permit 27
 - Baltimore District requires pre-construction notification (PCN)
- Individual Permit

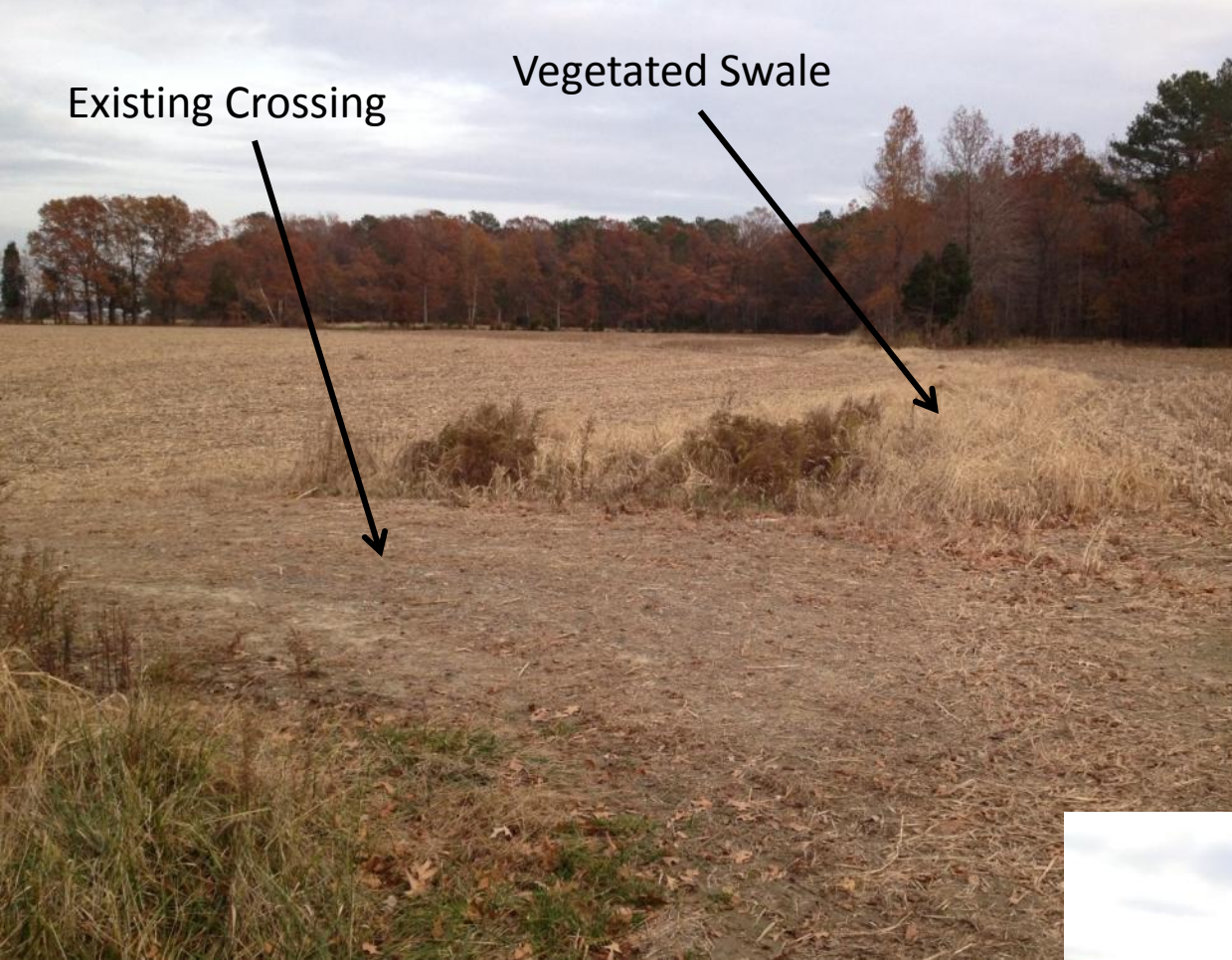
RLOA Conditions

- Combines nontidal wetlands and waterways in one authorization
- Limits:
 - 100 CY and 5,000 SF in the 100-year floodplain
 - 300 LF of stream channel
- Minimize wetland impacts
- No clearing woods to build berms – ditch plugs preferable in woods
- Cannot change 100-year floodplain to extent that it affects adjacent landowners



Existing Crossing

Vegetated Swale



Top Left: Area proposed for wetland restoration/shallow water area
Top Right: Vegetated swale just upstream of existing crossing
Bottom Right: Ditch downstream of planned shallow water area



Issues Relating to this Example

- Stream, ditch or swale?
 - If considered a stream, then must consider effect on 100-year floodplain
- If it is a stream, where does the floodplain begin?
- If this is truly a stream with a floodplain, should we be impounding water?

Issues Relating to this Example

- In the example, it was determined that the 100-year storm would raise the water level by 0.7 feet.
- NRCS would typically be concerned about maintaining adjacent landowner's drainage, but not so much about the change in the 100-year storm event, because in flat areas like these everyone expects flooding from a 100-year storm event.
- Would a field ditch that has groundwater discharge and is located on extremely flat ground be considered a stream with a floodplain? Most of the lower shore drained agricultural land fits this scenario.
- Why is the 100-year floodplain important from an MDE regulatory perspective?

Floodplain Definitions

Areas of low lying land that are subject to inundation by lateral overflow water from rivers or lakes with which they are associated

Junk, W.J. & Welcomme, R.L. (1990) Floodplains. In: *Wetlands and Shallow Continental Water Bodies*, ed. B.C. Patten et al., pp. 491–524. The Hague, The Netherlands: SPB Academic Publishers.

Floodplain Definitions

“Brinson (1990) and Brinson and Malvaréz (2002) proposed a hydrogeomorphic classification of wetlands that is based on the (1) geomorphic setting, (2) water source, and (3) hydrodynamics. Considering these components, riverine flood plains are located on low-gradient alluvial ‘shelves’; water sources are primarily from lateral overspill of river water, although other sources may also contribute to floodplain inundation; and, although primarily unidirectional, water flow is characterized by highly complex, multidimensional exchange pathways.”

In: Tockner and Stanford (2002). Riverine flood plains: present state and future trends. Environmental Conservation, 29, pp 308-330.

What We Would Like

- Regulatory certainty (too some extent) on jurisdictional determination of streams and floodplains
- A streamlined process for implementation of wetland restoration, shallow water area development, and other agricultural BMPs within waters of the State on agricultural lands
- More flexibility in the limits of disturbance allowed in these waters to implement activities that improve environmental quality

Potential Solutions

- Come up with a process for differentiating between a stream and a ditch with groundwater flow AND don't regulate ditches with groundwater flow as streams
- Issue a revised general permit that provides more flexibility in these types of situations
- Utilize a risk class system to distinguish between projects and allow more flexibility on low risk projects (i.e. areas of little to no infrastructure)

