Section V

WETLAND REPLACEMENT

8420.0515
SPECIAL CONSIDERATIONS

- Subpart 1: "The factors in this part, when identified as being applicable to an impact or a replacement site, must be considered by the applicant before submitting a replacement plan and by the LGU in the review of replacement plans."

- **The new language directs applicants to consider special considerations as well as the LGU.**

See page 57

8420.0520 SEQUENCING

- Subpart 2 (Application Options) has been deleted as sequencing applications are dealt with in part 8420.0325 of the "Application Procedures" section. **The option for an on-site sequencing decision without written documentation has been eliminated.**

- Pre-application meetings to provide up-front input and advice are important and strongly encouraged, but sequencing applications and decisions must be properly documented and noticed.

See page 59

SEQUENCING (Cont'd)

- Subp. 3C(3): *The LGU must consider the following in evaluating avoidance alternatives as applicable:*
  - *(b) the general suitability of the project site and alternative sites considered by the applicant to achieve the purpose of the project;*
  - *(f) the amount, distribution, condition, and public value of wetlands and associated resources to be affected by the project and the potential for direct and indirect effects over time.*
- This language does not imply that we should become experts in engineering, architecture, public safety, etc., but rather requires a big picture focus on general site suitability.

See page 61

Decisions on Minimization

- The previous Subp. 4B (which required the LGU to list in writing its objections when minimization has not been complied with and then gave the applicant 30-days to withdraw the proposal or "indicate intent") has been deleted to avoid complications with MN Statute 15.99.

- **Impact minimization will now be dealt with the same as any other issue**, whether part of a replacement plan or a separate sequencing application.

Impact Rectification/No-Loss

- Subp. 5. Impact Rectification. The specific language describing a “no-loss determination” has been relocated to 8420.0415 (No-Loss Criteria), Item H.

See page 63

Sequencing Flexibility

- Subp. 7A. Clarification was added that:
  - Sequencing flexibility is "*requested by the applicant and allowed at the discretion of the LGU*."
  - Flexibility applies to the "*order and application of sequencing standards*."
  - "*The applicant must provide the necessary information and the LGU must document the application of sequencing flexibility in the replacement plan approval*."

See page 64

Sequencing for wetlands on cultivated fields (Subp. 8)

- When a replacement plan is approved under this subpart, **the landowner must provide documentation to the LGU that the required restrictions have been recorded with the county.**

- Providing documentation of recording is a condition of replacement plan approval – the wetland cannot be impacted until the documentation is provided.

See page 65

8420.0522

REPLACEMENT STANDARDS

General Requirement of Replacement

- *Wetland replacement must replace the public value of wetlands lost as a result of an impact. The public value of wetlands is based upon the functions of wetlands, including:*

A. water quality…;

B. flood water and storm water retention…;

C. public recreation and education…;

D. commercial uses…;

E. fish, wildlife, and native plant habitats;

F. low flow augmentation; and

G. other functions and public uses as identified in wetland evaluation methods… approved for wetland evaluation…

See page 65

United States Environmental Protection Agency

Office of Water
Office of Wetlands, Oceans and Watersheds (4502T)

EPA 843-F-01-002c
September 2001

EPA

Functions and Values of Wetlands

Dave Davis

Wetlands are considered valuable because they clean the water, recharge water supplies, reduce flood risks, and provide fish and wildlife habitat. In addition, wetlands provide recreational opportunities, aesthetic benefits, sites for research and education, and commercial fishery benefits.

Long regarded as wastelands, wetlands are now recognized as important features in the landscape that provide numerous beneficial services for people and for fish and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters, and maintaining surface water flow during dry periods. These beneficial services, considered valuable to societies worldwide, are the result of the inherent and unique natural characteristics of wetlands.

Functions Versus Values

Wetland functions include water quality improvement, floodwater storage, fish and wildlife habitat, aesthetics, and biological productivity. The value of a wetland is an estimate of the importance or worth of one or more of its functions to society. For example, a value can be determined by the revenue generated from the sale of fish that depend on the wetland, by the tourist dollars associated with the wetland, or by public support for protecting fish and wildlife.

Although large-scale benefits of functions can be valued, determining the value of individual wetlands is difficult because they differ widely and do not all perform the same functions or perform functions equally well. Decision-makers must understand that impacts on wetland functions can eliminate or diminish the values of wetlands.

Water storage. Wetlands function like natural tubs or sponges, storing water and slowly releasing it. This process slows the water's momentum and erosive potential, reduces flood heights, and allows for ground water recharge, which contributes to base flow to surface water systems during dry periods. Although a small wetland might not store much water, a network of many small wetlands can store an enormous amount of water. The ability of wetlands to store floodwaters reduces the risk of costly property damage and loss of life—benefits that have economic value to us. For example, the U.S. Army Corps of Engineers found that protecting wetlands along the Charles River in Boston, Massachusetts, saved $17 million in potential flood damage.

Water filtration. After being slowed by a wetland, water moves around plants, allowing the suspended sediment to drop out and settle to the wetland floor. Nutrients from fertilizer application, manure, leaking septic tanks, and municipal sewage that are dissolved in the water are often absorbed by plant roots and microorganisms in the soil. Other pollutants stick to soil particles. In many cases, this filtration process removes much of the water's nutrient and pollutant load by the time it leaves a wetland. Some types of wetlands are so good at this filtration function that environmental managers construct similar artificial wetlands to treat storm water and wastewater.

Red-osier dogwood

"Functions and Values"

http://www.epa.gov/owow/wetlands/pdf/fun_val.pdf

"Function and Value"

- Functions are the physical, chemical, and biological processes occurring in and making up an ecosystem.
- Value is an estimate of worth, merit, quality, or importance. The value of a wetland will be based on the functions it provides and the relative benefit of those functions to the public (on a watershed basis).
- For example, groundwater quantity may be very important to a watershed in Washington County east of the Twin Cities, but surface water quality may be more important to a watershed in Lake of the Woods County.

Subp. 3, In-Kind Wetland Replacement

- "In-kind means a wetland of similar type and function to the impacted wetland. Wetland replacement is in-kind if it is:

  - A. the same type or plant community as the impacted wetland or, for degraded wetlands, the same type or plant community that historically occurred at the impact site; or

  - B. the same hydrologic conditions and landscape position as the impacted wetland."

See page 66

In-Kind (Cont'd)

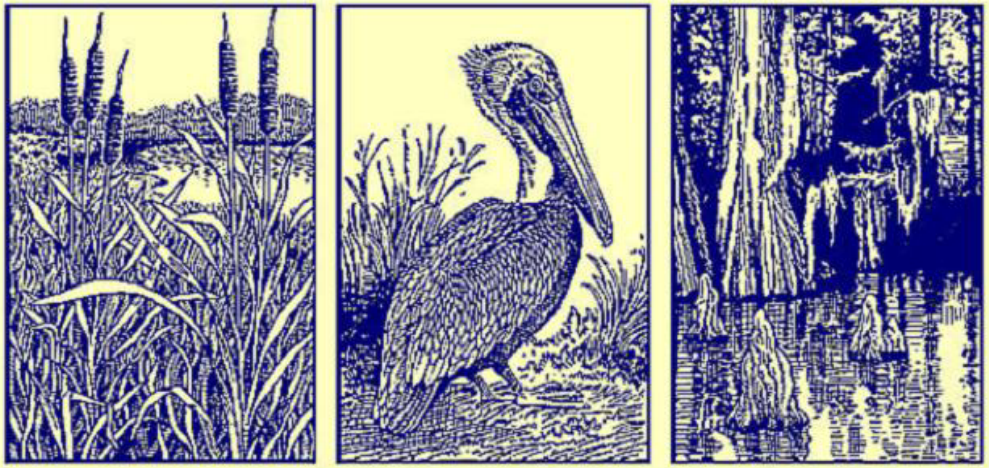
- Hydrologic conditions? Where does the water come from?
  - Surface water driven from upslope overland flow
  - Groundwater fluctuations (regional or perched)
  - Flow-through
  - Overbank flow
  - What is the level and persistence of saturation/inundation?
- Landscape position?
  - Depressional (no inlet or outlet, inlet only, outlet only, inlet and outlet)
  - Slope
  - Channel
  - Floodplain
  - Fringe
  - "Blanket bog"/raised

US Army Corps
of Engineers
Waterways Experiment
Station

Wetlands Research Program Technical Report WRP-DE-4

A Hydrogeomorphic Classification for Wetlands

by Mark M. Brinson

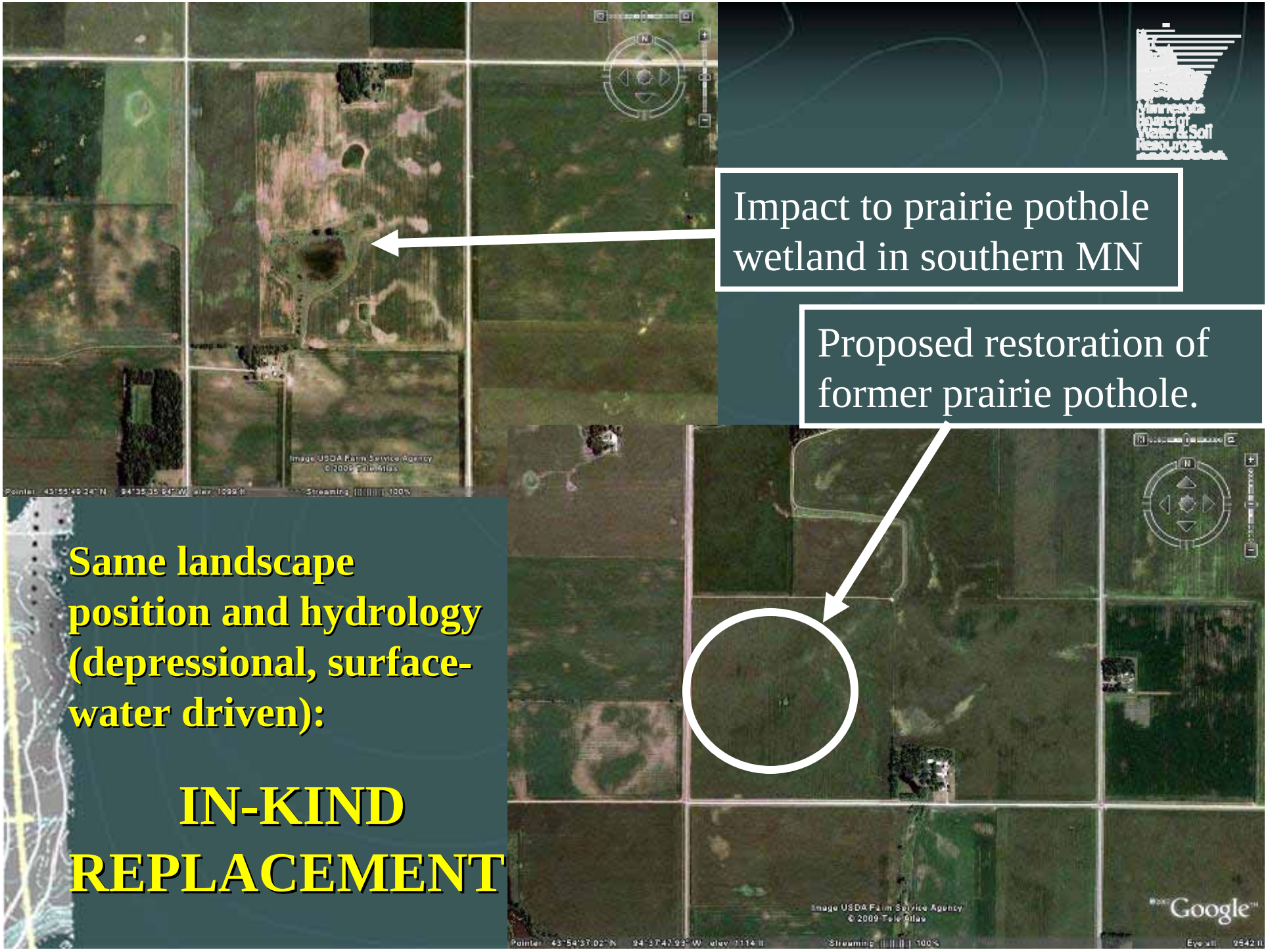


August 1993 – Final Report
Approved For Public Release; Distribution Is Unlimited

HGM

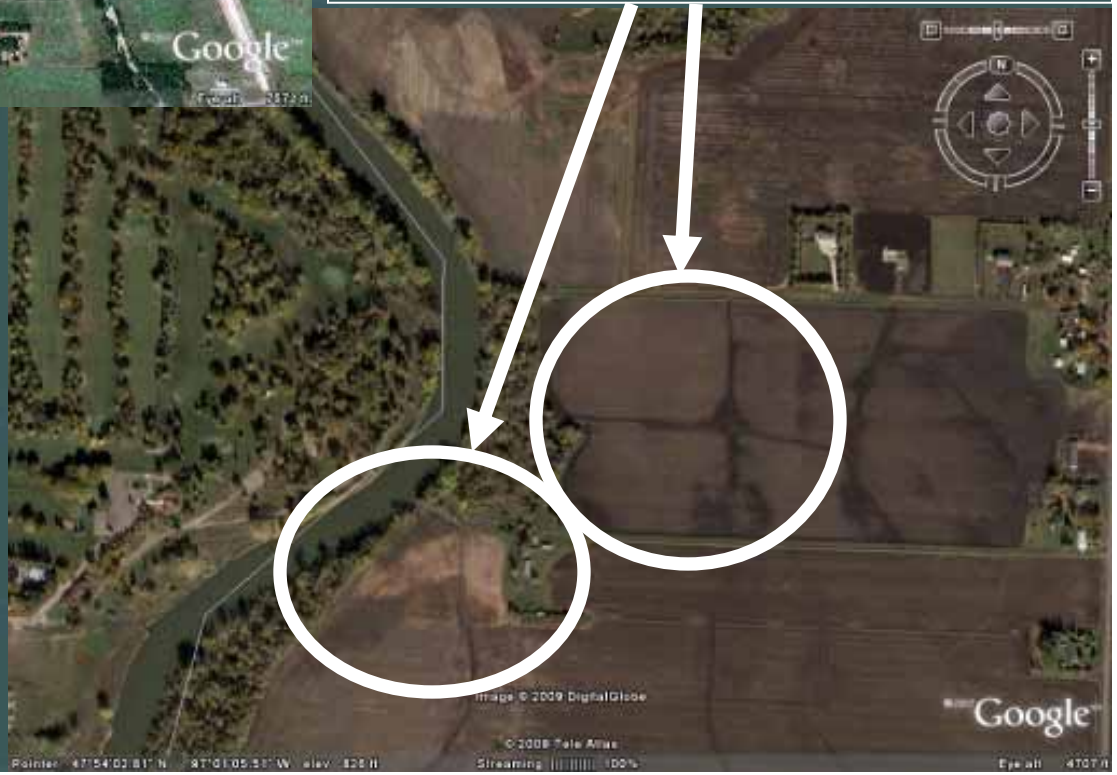
See the Corps' Environmental Laboratory (ERDC) website for additional information.

http://el.erdc.usace.army.mil/wetlands/pdfs/wrpde4.pdf


Impact to prairie pothole wetland in southern MN
Proposed restoration of former prairie pothole.
Same landscape position and hydrology (depressional, surface-water driven):
IN-KIND REPLACEMENT
Image USDA Farm Service Agency
© 2009 Tele Atlas
Google

Impact to wetland in the floodplain of a river

Proposed restoration of wetland in a river floodplain

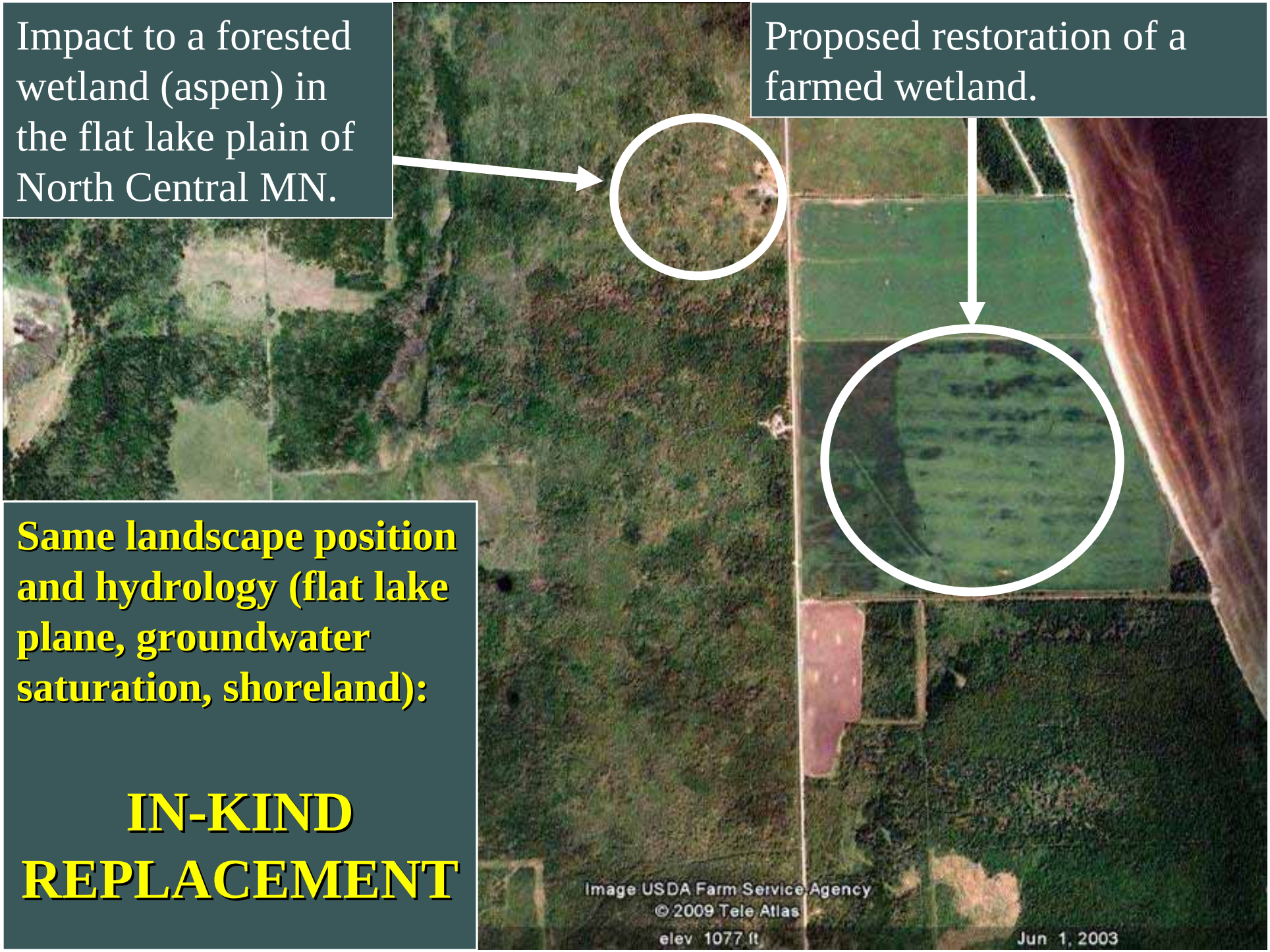


Same landscape position (floodplain) and hydrology (overbank and overland flow):

IN-KIND REPLACEMENT

Impact to a forested wetland (aspen) in the flat lake plain of North Central MN.

Proposed restoration of a farmed wetland.



Same landscape position and hydrology (flat lake plane, groundwater saturation, shoreland):

IN-KIND REPLACEMENT

In-Kind and Forested Wetlands (same hydrologic conditions and landscape position)

- National Research Council: "To develop a wetland that will ultimately require low maintenance, natural successional processes need to be allowed to proceed. For forested wetlands, an initial period of invasion by undesirable species might be temporary if proper hydrological conditions are imposed and if trees shade out early invaders."
- This (and other research) indicates the importance of landscape position and hydrology in establishing sustainable vegetative communities.

Subp. 4, Replacement Ratios

- "The replacement ratio is 2.5 replacement credits for each acre of wetland impacted, except in >80% areas or on agricultural land the replacement ratio is 1.5 replacement credits for each acre of wetland impacted. The replacement ratio may be reduced by 0.5:1 when the replacement consists of:
  - (1) withdrawal of available credits from an approved wetland bank site within the same bank service area as the impacted wetland; or
  - (2) project-specific replacement within the same major watershed or county as the impacted wetland, a majority of which is in-kind."

See page 66

Banking Ratios

Minimum Replacement Ratios: Banking		
Location of impact	Replacement	Minimum replacement ratio
>80% area or agricultural land	Outside bank service area	1.5:1
	Within bank service area	1.1
<50% area, 50-80% area, ~~or~~ and nonagricultural land	Outside bank service area	2.5:1
	Within bank service area	2:1

- 2.5:1 and 1.5:1 are the base ratios (not 2:1/1:1).
- The ratio can be reduced by .5:1 when replacement is both through banking (in-advance) and in the same BSA.

Project-Specific Ratios

Minimum Replacement Ratios: Project-Specific		
Location of impact	Replacement	Minimum replacement ratio
>80% area or agricultural land	Outside major watershed or out-of-kind	1.5:1
	Within major watershed and in-kind	1.1
<50% area, 50-80% area, ~~or~~ and nonagricultural land	Outside major watershed or out-of-kind	2.5:1
	Within major watershed and in-kind	2:1

- Same base ratios of 2.5:1 and 1.5:1.
- The ratio can be reduced by .5:1 when replacement is both in-kind and in the same major watershed.

Replacement Ratios and In-Kind

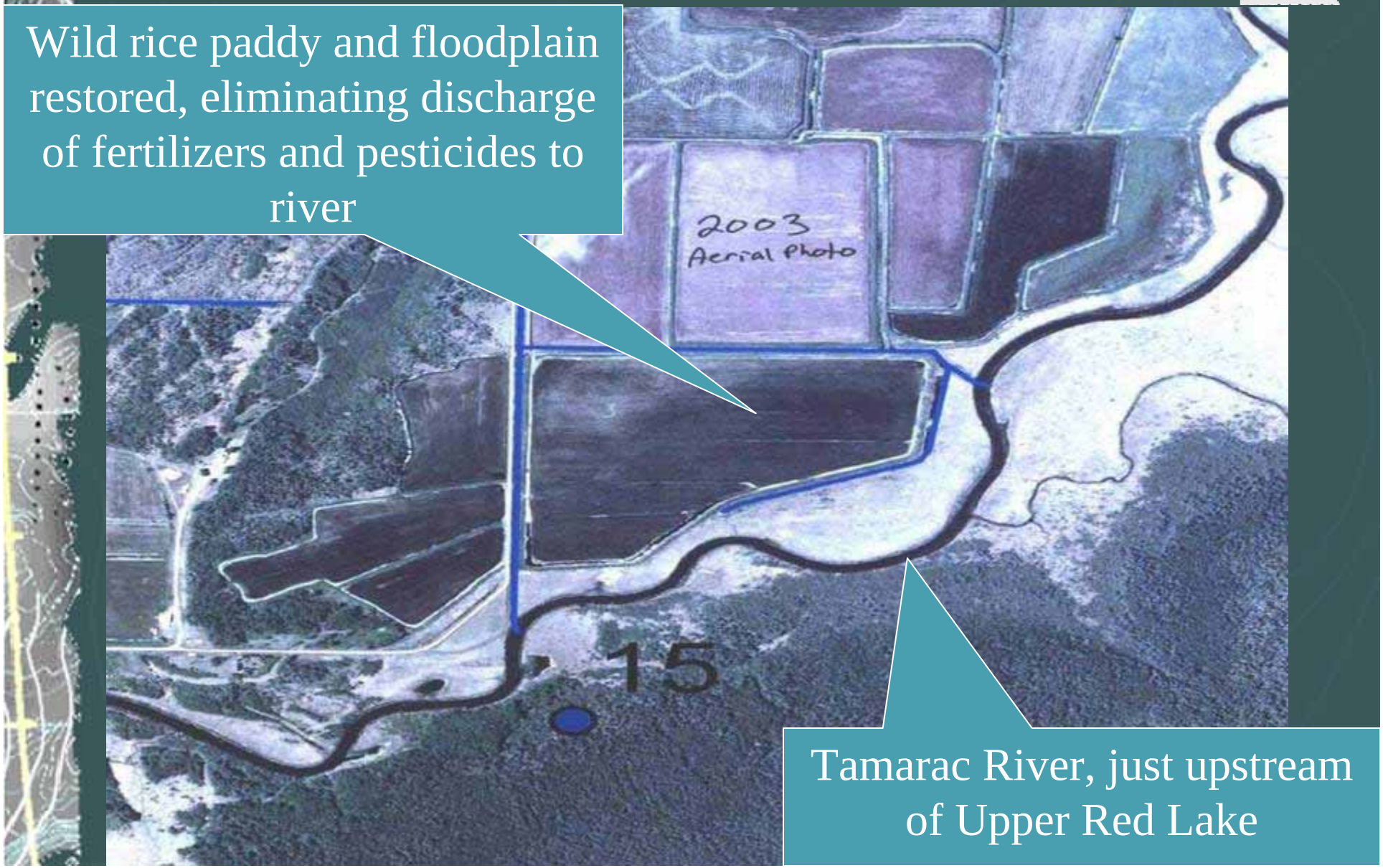
- "…the LGU may authorize the use of out-of-kind wetland replacement in the same ratio allowed for in-kind replacement… when it consists of a type or plant community that has been **significantly lost in the watershed or that will provide important functional benefits to the watershed…, as determined by the TEP** based on a review of available evidence or according to a local plan approved by the board."

- "A reduced ratio for out-of-kind is typically not appropriate for wetlands that are difficult to replace, such as white cedar swamps or bogs."

In-Kind: "A type or plant community that has been significantly lost in the watershed…"

- Preferably a plan or some type of analysis can be utilized.
- Where an adequate plan doesn't exist:
  - Look at original land survey notes – what vegetation originally existed?
  - Look at County Biological Survey, Soil Survey, and other inventories and studies.
  - Consider landscape position and hydrologic sources.
  - Look at adjacent or nearby undisturbed wetlands in similar hydrogeomorphic position.
  - Rely on experience and history of locals and/or general knowledge of the region.
- I.E., prairie potholes in SW, white cedar swamps in NE, etc.

Providing “important functional benefits”



Ratios and In-Kind (cont'd)

- In essence, replacement projects such as the previous example are so valuable to the watershed, that they can be used for replacement in the same ratio as in-kind.

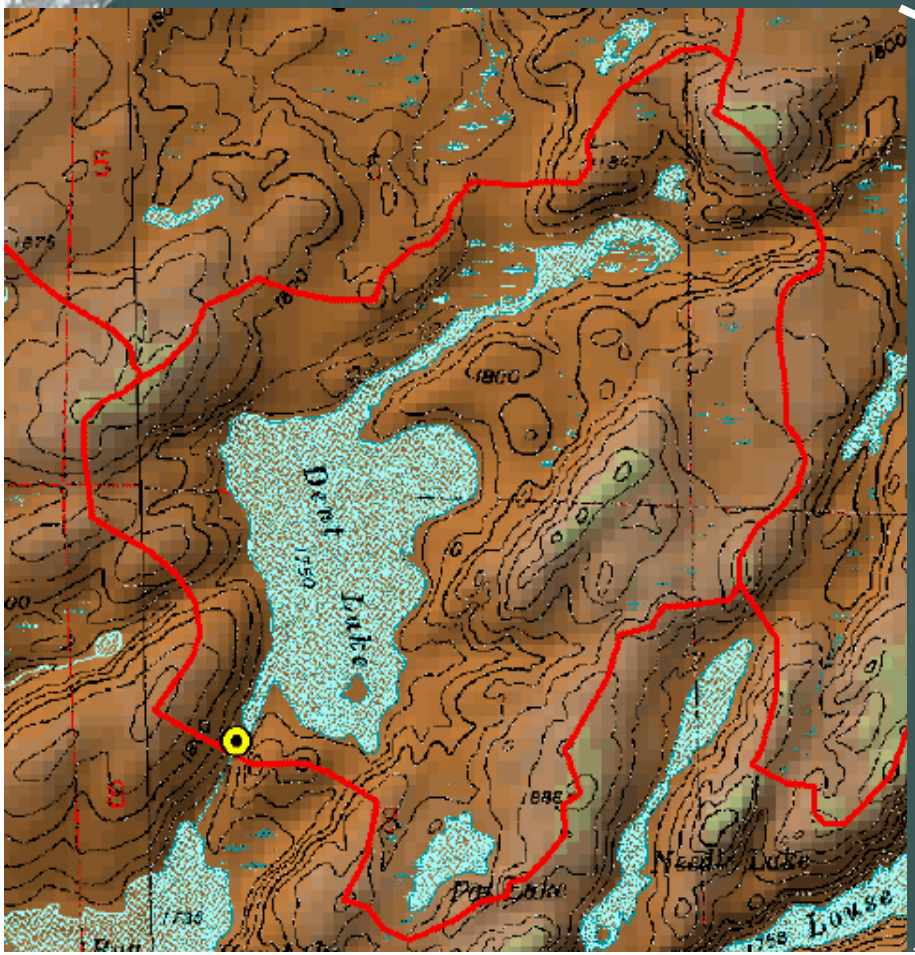
- However, when "difficult to replace" wetlands are impacted and replaced out-of-kind, they should not being eligible for a reduced ratio.
  - For example, since white cedar swamps are extremely difficult to establish, the functions they provide are likely lost when impacted. Thus the increased ratio is required if replaced with something other than a white cedar swamp.

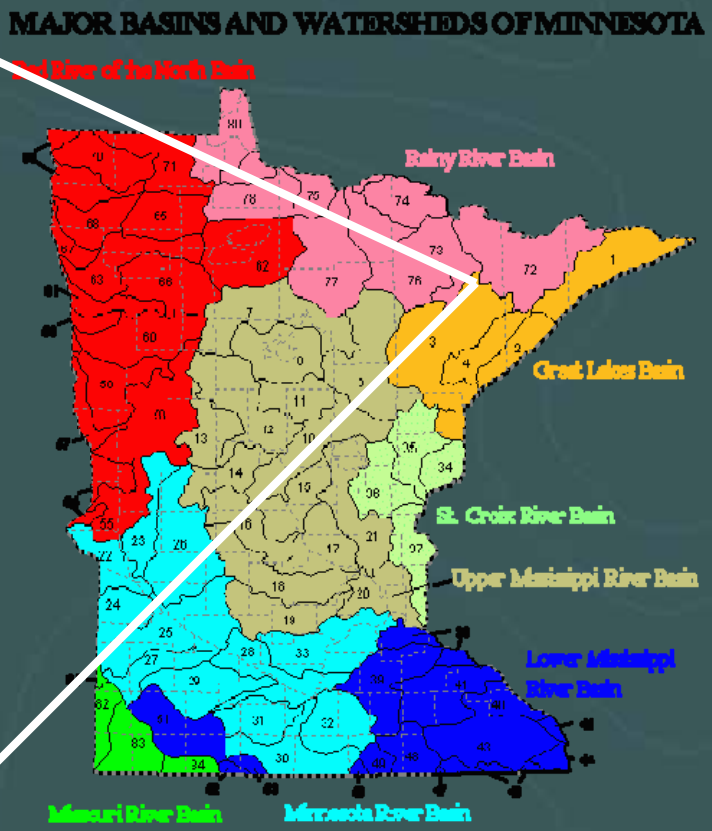
Why the changes to In-Kind?

- National Research Council Report:
- "…while vegetation may be easily measured, it is a poor indicator of function..."
- "Numerous sites… were not positioned in landscape locations that would ensure sustainability. This observation was judged to be due in part to the preference of on-site, in-kind mitigation. Some sites were properly located but were threatened by future developments in the watershed, demonstrating that landscape position alone is not sufficient."

Ecological suitability and sustainability

- This new subpart consolidates similar existing rule language and adds concepts from the "watershed approach" to mitigation promoted by the National Research Council and required in the new federal mitigation rule.





Definition of a "watershed approach" in the federal rule:

"an analytical process for making compensatory mitigation decisions that support the sustainability or improvement of aquatic resources in a watershed. It involves consideration of watershed needs, and how locations and types of compensatory mitigation projects address those needs. A landscape perspective is used to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by DA permits. The watershed approach may involve consideration of landscape scale, historic and potential aquatic resource conditions, past and projected aquatic resource impacts in the watershed, and terrestrial connections between aquatic resources when determining compensatory mitigation requirements for DA permits."

The "Watershed Approach"

- The "watershed approach" considers factors such as landscape position; surrounding land use and sustainability; habitat requirements; development and habitat loss trends; sources of watershed impairment; the protection and maintenance of upland resources and riparian areas; and providing multiple functions.
- **Simply put, the "watershed approach" is identifying your watershed needs (goals) and prioritizing wetland mitigation sites/projects to meet those needs. In other words, the types and locations of replacement are most valuable.**
- It forces the LGU and TEP to think about and identify what is most important for a given watershed (wildlife habitat, water quality, etc.).

Another way to look at wetland replacement

- 8420.0550 subp. 2 H (Current Rule): Created wetlands should have an irregular edge to create points and bays…
- So why would we allow excavation of these same features adjacent to existing wetlands for replacement credit?
- We shouldn't!!!

Keep in mind how all this relates to the public interest to….

- …achieve no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands…
- …avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands…
- **The focus needs to be on more than just acres!**

8420.0522, Subp. 5, Ecological Suitability and Sustainability.

- The preferred method of replacement is that which takes advantage of naturally occurring hydrogeomorphic conditions with minimal landscape alteration and is most likely to result in a wetland area that functions wholly, perpetually, and naturally.

- Wetland restoration is generally preferred over creation and restoration of completely impacted wetlands is generally preferred over other methods of replacement.

See pages 65-78

Ecological suitability and sustainability (cont'd)

- Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area.

- The replacement site must be ecologically suitable for providing the desired functions and compatible with adjacent land uses. A replacement plan that would result in wetland types or characteristics that do not naturally occur in the landscape area in which the replacement will occur must be denied.

- Replacement must not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area.

Ecological suitability and sustainability (cont'd)

- Replacement projects must be located and designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved.

- "Self-sustaining" refers to the ability of a wetland to provide the desired functions over time in a changing landscape without human intervention.

Self-Sustaining?

- Examples of replacement that is likely to be self-sustaining:
  - Tile breaks in natural basin
  - A wetland restored adjacent to a lake or protected habitat with a sufficient buffer
  - Almost all restorations of natural conditions when watershed conditions and runoff amounts haven't and won't change significantly
- Examples of replacement where there is increased potential to NOT be self-sustaining:
  - A wetland restoration or creation next to judicial ditch in need of repair (or adjacent to any land where the right to drain it exists and that drainage could effect the replacement wetland)
  - The site is surrounded by reed canary grass or other invasives and their removal or control is not possible
  - An urban housing development where the replacement wetland is in or adjacent to open land that is likely to develop in the future
  - Constructed wetlands where the hydrology is dependent on long berms

Ecological suitability and sustainability (cont'd)

- In addition to items A to C, when determining the location, type, function, and design of replacement, applicants and LGUs must consider:
  - landscape position,
  - habitat requirements,
  - development and habitat loss trends,
  - sources of watershed impairment,
  - protection and maintenance of upland resources and riparian areas, and
  - providing a suite of functions.

Why all the changes?

- New emphasis on a "watershed approach" to good site selection in the new Federal mitigation rule.
- Current science (National Research Council, etc.) tells us that **site selection is one of the most important factors in determining wetland mitigation success.**
- It helps us more efficiently achieve broader, watershed goals (impaired waters, trout stream protection, wildlife habitat, flood attenuation, etc.).
- Many wetland replacement projects have failed (even after 17 yrs. of WCA) to replace the public value of wetlands lost.

Quotes from the National Research Council:

- Site selection for wetland conservation and mitigation should be conducted on a watershed scale in order to maintain wetland diversity, connectivity, and appropriate proportions of upland and wetland systems needed to enhance the long-term sustainability of the wetland and riparian systems.
- **Hydrology is… the primary driving force** influencing wetland development, structure, function, and persistence.
- (In evaluating 30 mitigation projects in California, DeWeese found that): **There was no net loss in area as a result of permitting, but there was a net loss in ecological functionality.**

What does this mean for wetland replacement?

- Greater reliance on professional judgment (use the TEP!).
- A "big picture" view of WCA and natural resource conservation.
- Greater emphasis on planning efforts and detailed analysis of existing conditions; types, amounts, and locations of wetlands lost; watershed needs; prioritization of replacement types, locations, and functions; etc.
- **Greater emphasis on site selection by expanding on the concepts of sustainability, connectivity, and functional benefit to the watershed.**
- Increased consideration of current and adjacent land use, sustainability, and long term function.

More Professional Judgment???

National Research Council:

- "Most wetland scientists argue that science-based, regionally standardized procedures are preferable to best professional judgment in comprehensively evaluating wetland function for both impacted and mitigation sites."
- "As a result, the general absence of a uniform approach to assessing wetlands as multifunctional ecosystems have likely encouraged less complex wetland mitigation designs and rudimentary measures of achieving mitigation goals."

Watershed Goals and Public Value

Restoration contributing to the trout stream - Good

Trout Stream

Wetland creation next to ball field and not contributing to stream – Not as Good

Both projects may yield the same amount of credit, but clearly one is preferable when considering watershed goals and the resulting public value.

Watershed Goals and Public Value

If you are in the pothole region, you will have a different perspective.

Restoration of small potholes for waterfowl may be a priority.

Watershed Goals and Public Value

Large Waterfowl Production Area

Prioritize projects and replacement sites that directly contribute to the water quality of this area and/or provide adjacent habitat.

Current and future adjacent land use…

Change in future land use.

Important Points to Remember about Selecting Replacement Sites

- Credit Yield ≠ Good Replacement. Just because a project can potentially generate replacement credits does not mean it is a good replacement site. We must consider replacement standards and siting criteria (ecological suitability and sustainability).

- LGUs and TEPs can say NO to bad sites even if they generate credit! They have replacement and siting standards, including the requirement to replace lost public value, as a basis for denying bad sites.

Subp. 6. Required upland buffer

- "Establishment or preservation of unmanicured vegetated upland buffer areas **is required adjacent and contiguous to replacement wetlands receiving credit** under part 8420.0526, subparts 3 to 7."

- "For replacement wetlands less than two acres in size, the buffer must be a minimum average width of 25 feet. For all other replacement wetlands, the buffer must be a minimum width of 25 feet and an average width of 50 feet."

See page 70

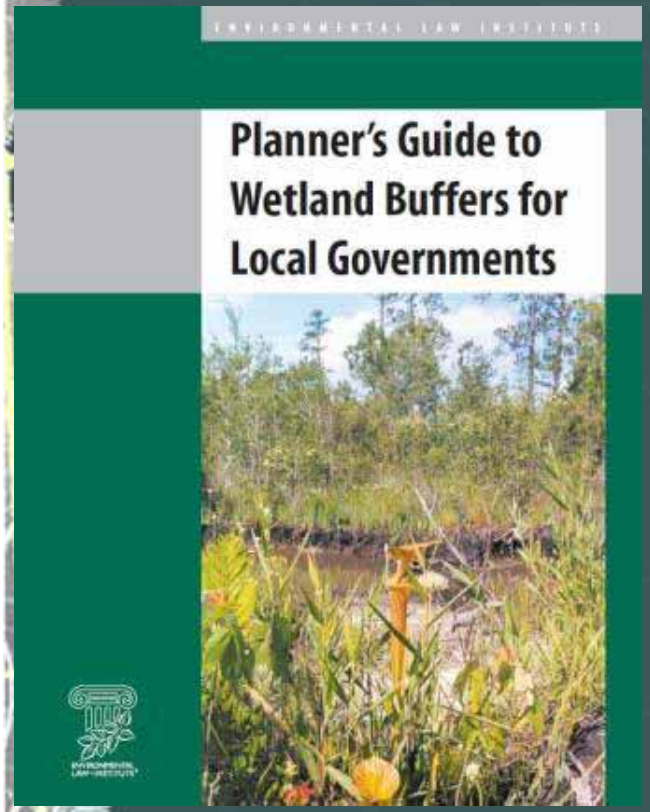
Required upland buffer (cont'd)

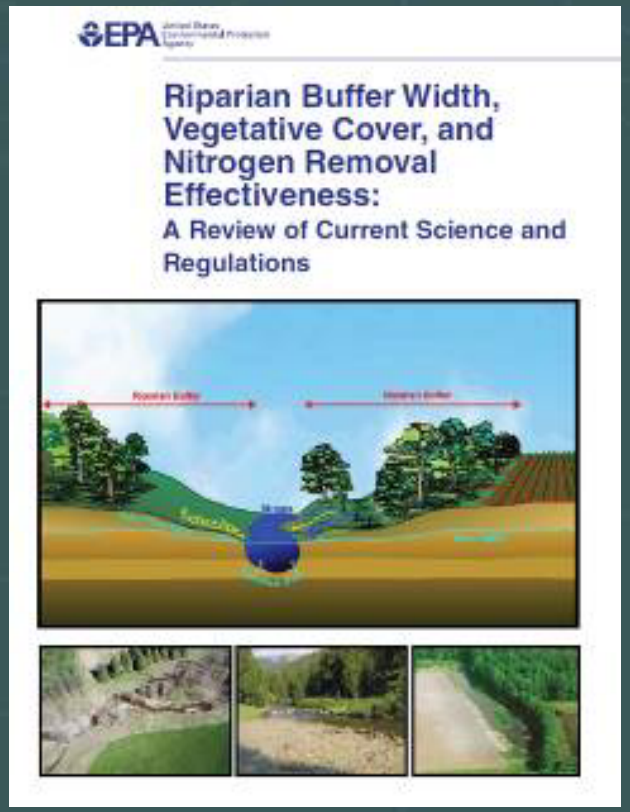
- "The LGU may vary the standards… based on a recommendation by the TEP when compliance is not practicable or feasible, and the replacement wetland will otherwise meet the requirements of subpart 5, or when the variance would be ecologically beneficial."

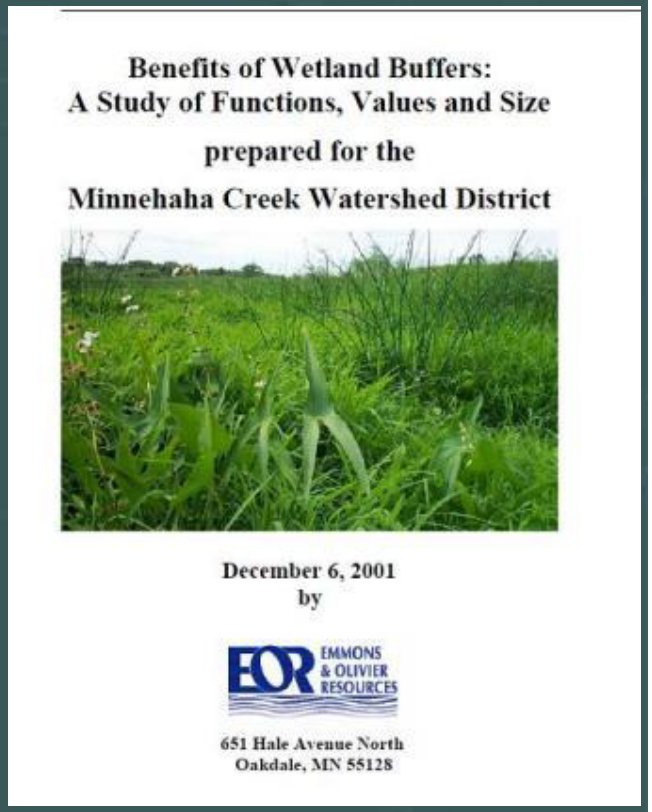
- OK, but first - why the new buffer the requirement?

The Science of Buffers

- The scientific evidence that buffers significantly influence and contribute to wetland function is overwhelming.

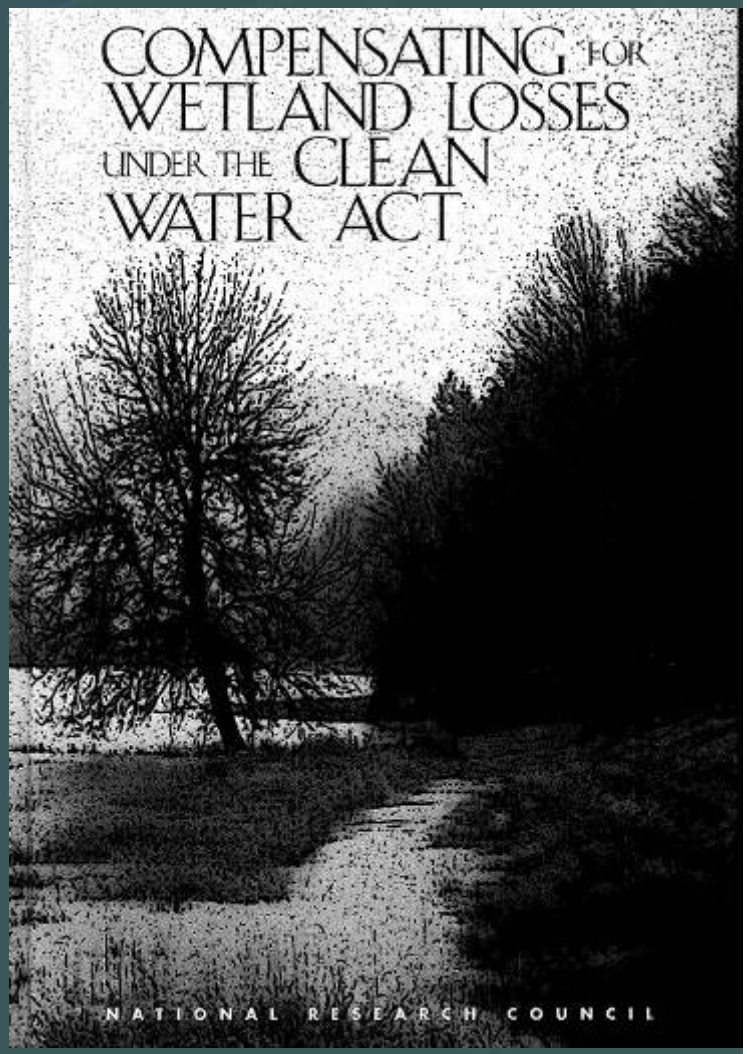




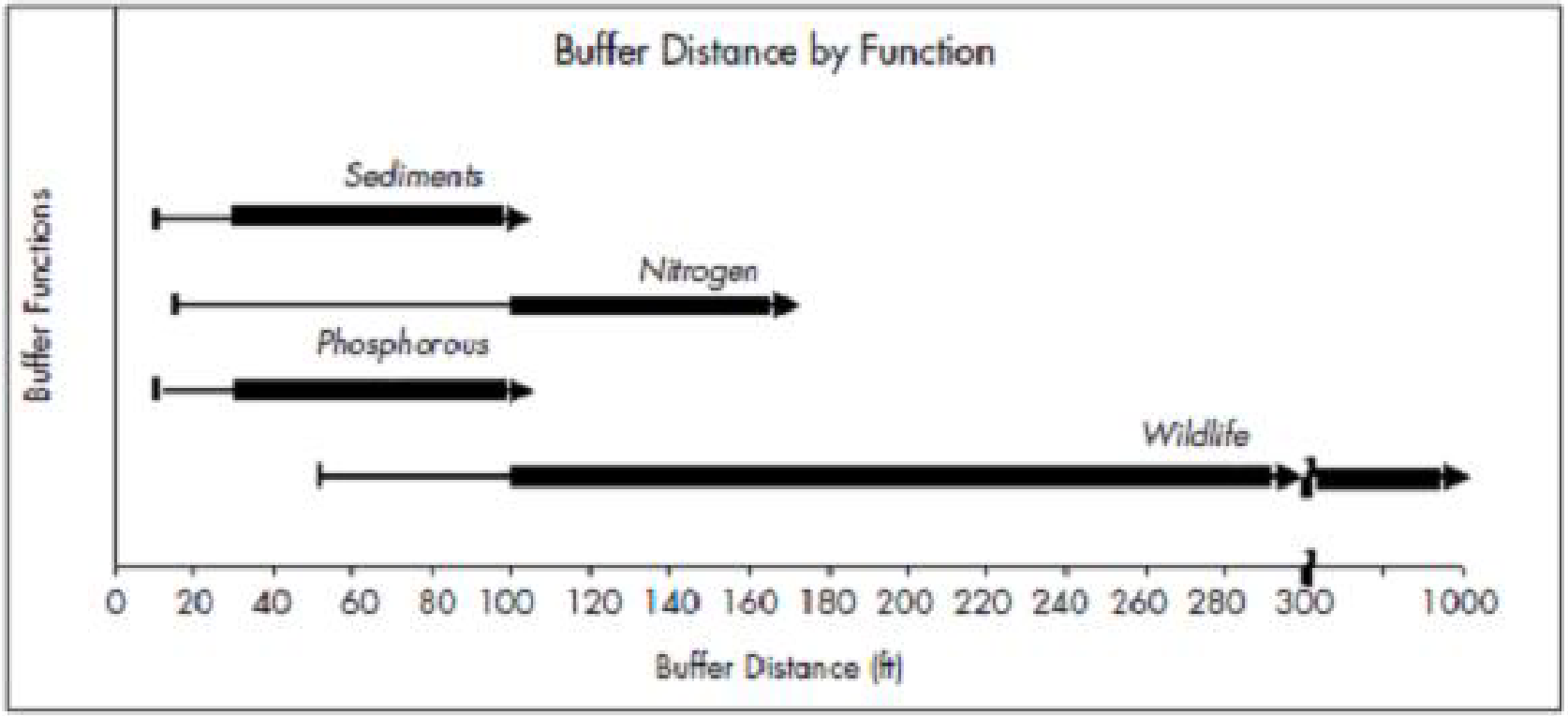


Buffer Science

- "For functions such as water quality and nutrient retention, edge interface with stream or upland is probably more important than (wetland) area."
- ".. an undisturbed upland buffer… is essential for some species."
- "…wetlands excised from the functions of their surrounding uplands will function at a reduced level."
- "The aquatic and semiaquatic fauna that use wetlands are key components of wetland structure, productivity, and overall functioning. However, many of the species of animals for which the aquatic portion of a wetland is critical are equally dependent on the surrounding terrestrial habitat."



Buffer Width by Function



*Effective buffer distance for water quality and wildlife protection functions. The thin arrow represents the range of potentially effective buffer distances for each function as suggested in the science literature. The thick bar represents the buffer distances that may **most** effectively accomplish each function (30 - > 100 feet for sediment and phosphorous removal; 100 - > 160 feet for nitrogen removal; and 100 - >300 feet for wildlife protection. Depending on the species and the habitat characteristics, effective buffer distances for wildlife protection may be either small or large.*

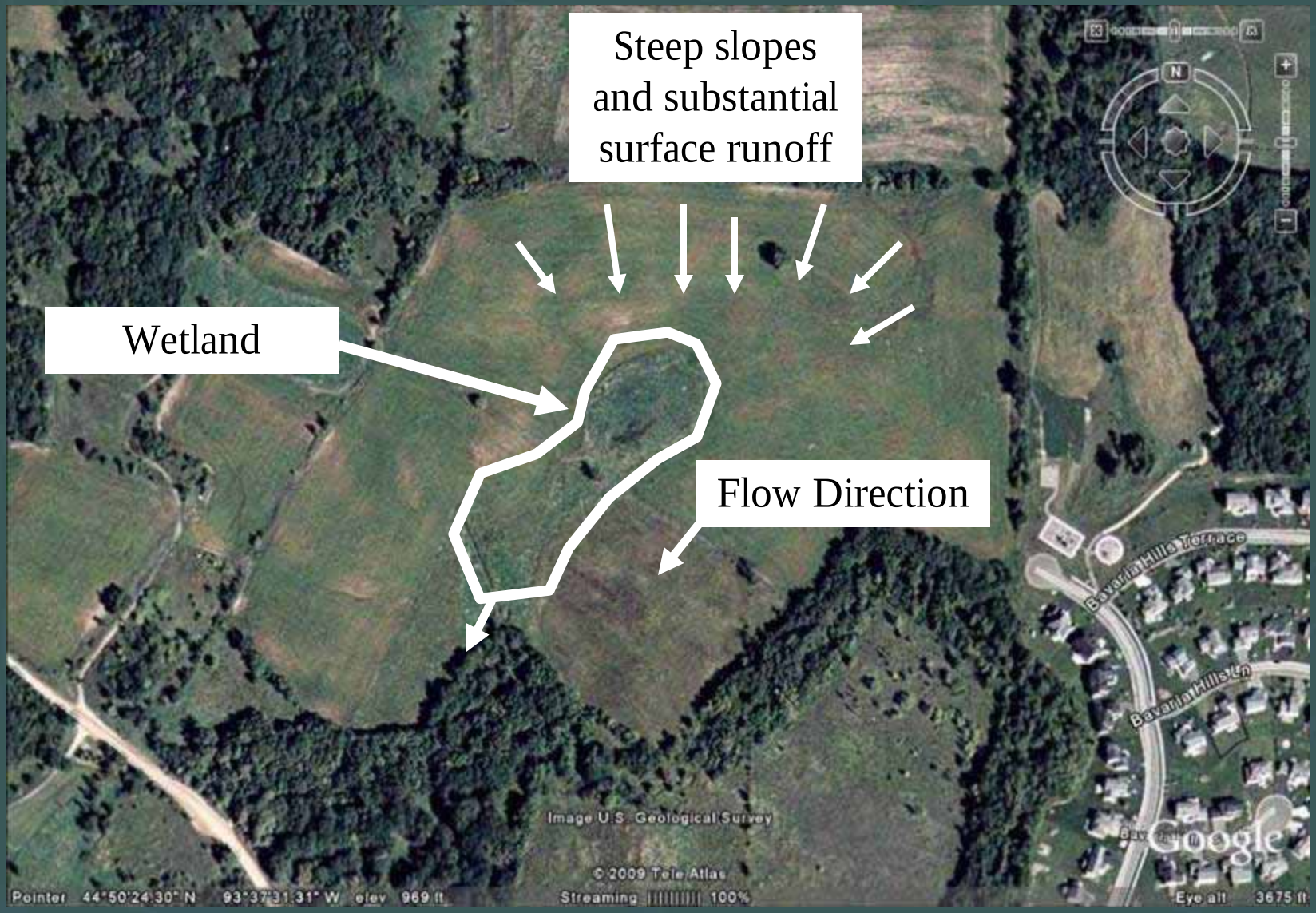
ELI Report 2008

When to vary the buffer standard

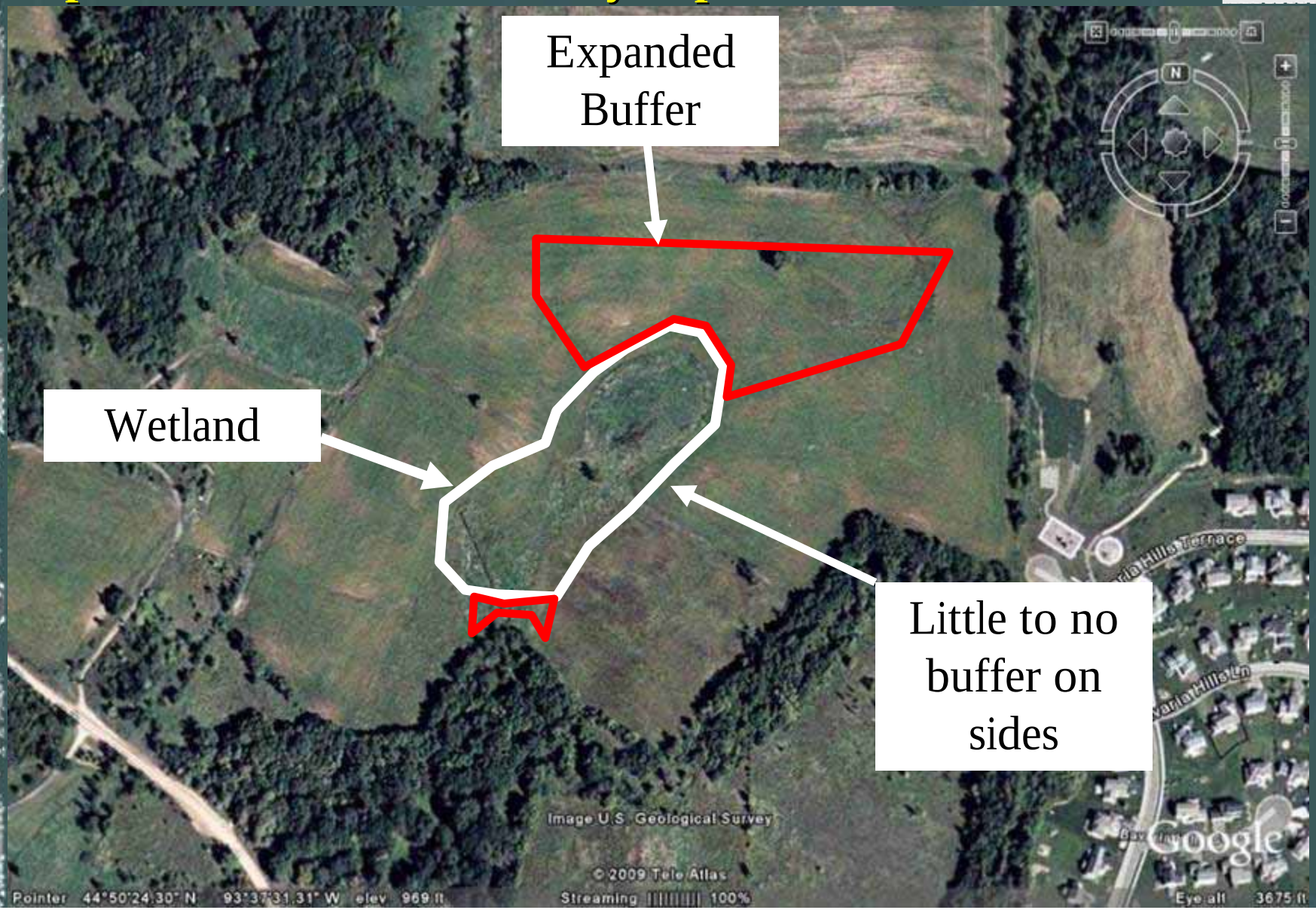
If the property line crossed the area that of the 25 ft minimum buffer.

The TEP could deviate the requirement and allow the buffer to be smaller at the property line.

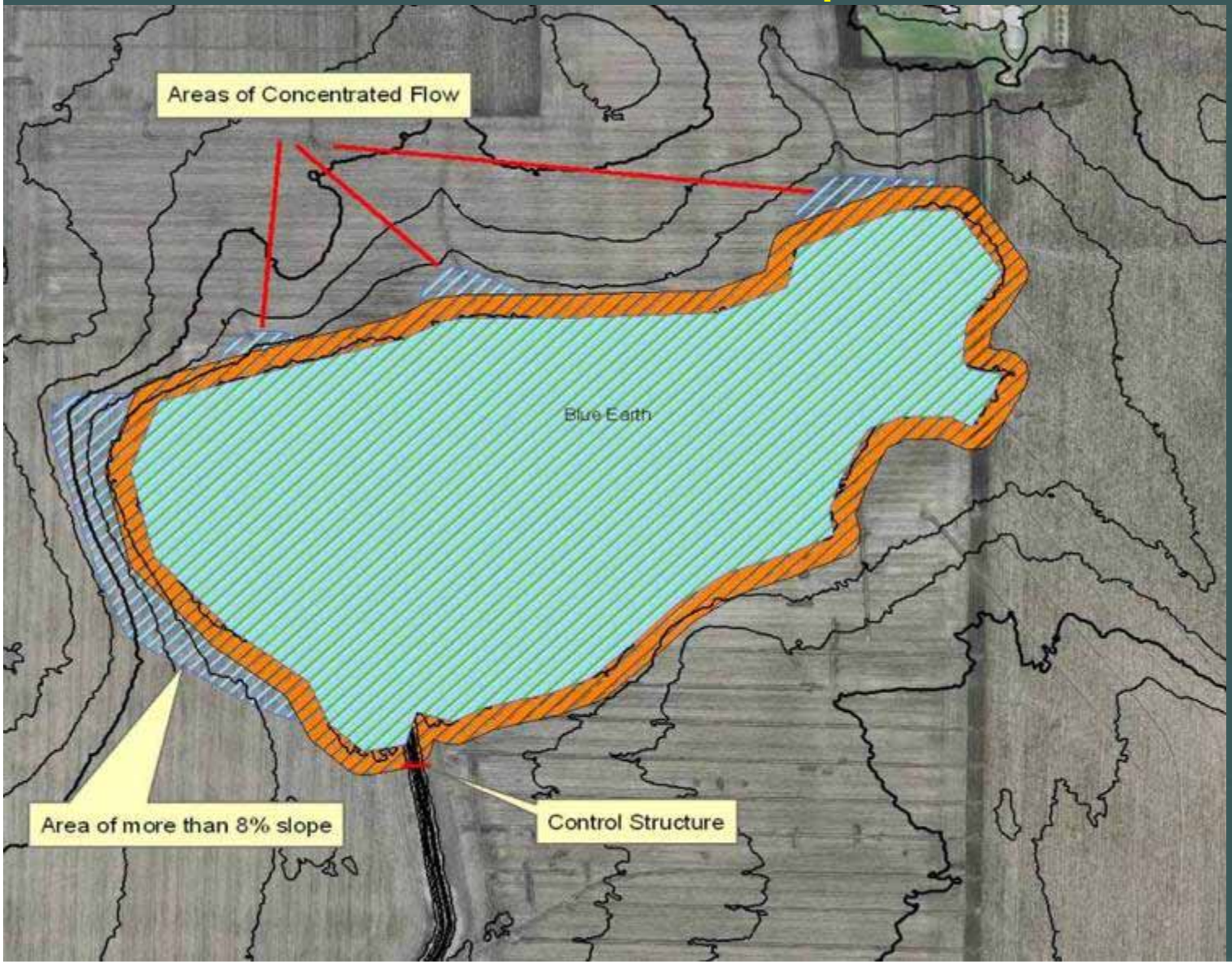
Where can we maximize the buffer to be most effective for <u>water quality</u> purposes?



If water quality is the goal (i.e. impaired watershed), the buffer standard could be varied to maximize the replacement wetland's ability to perform that function.

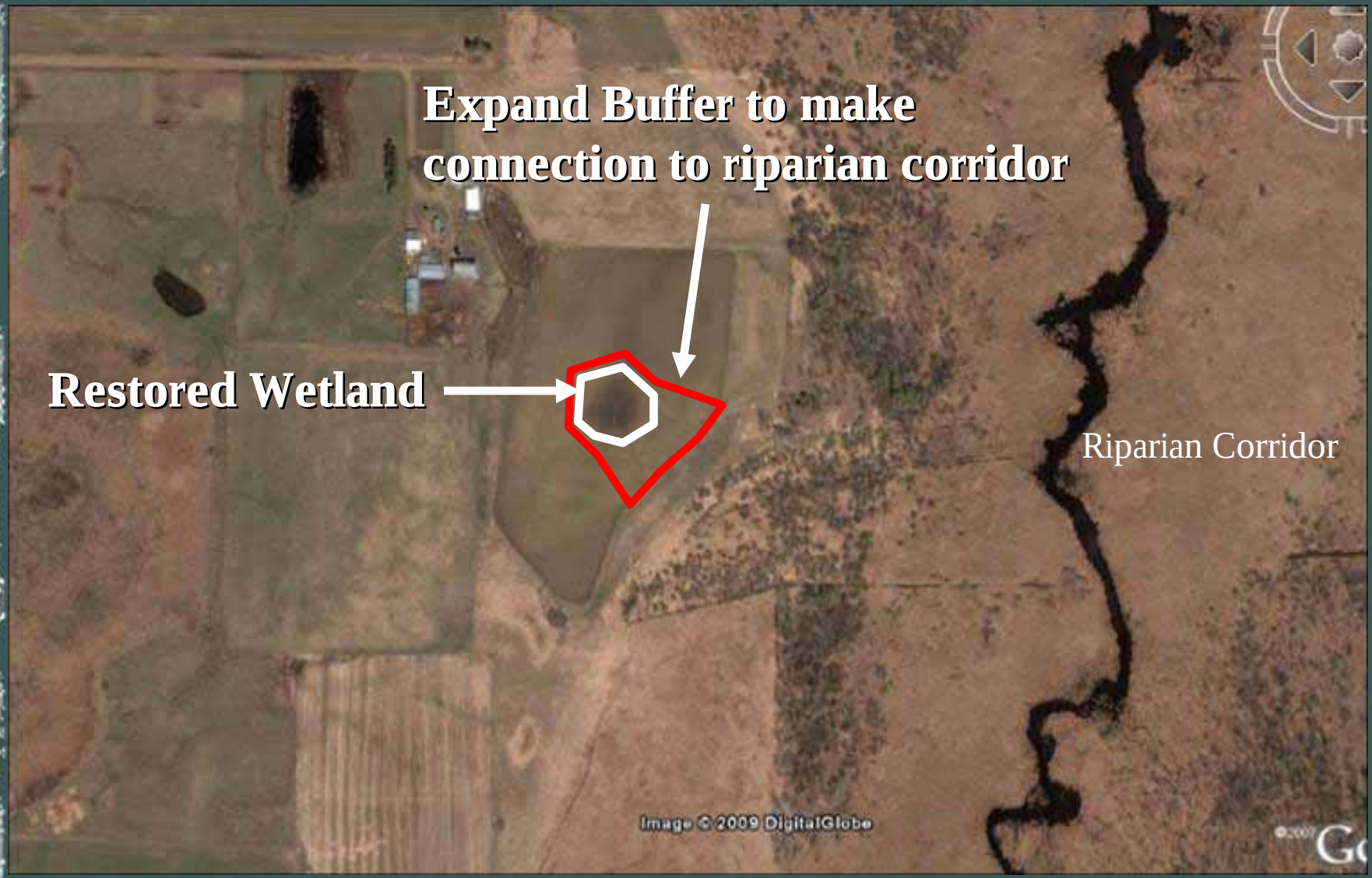


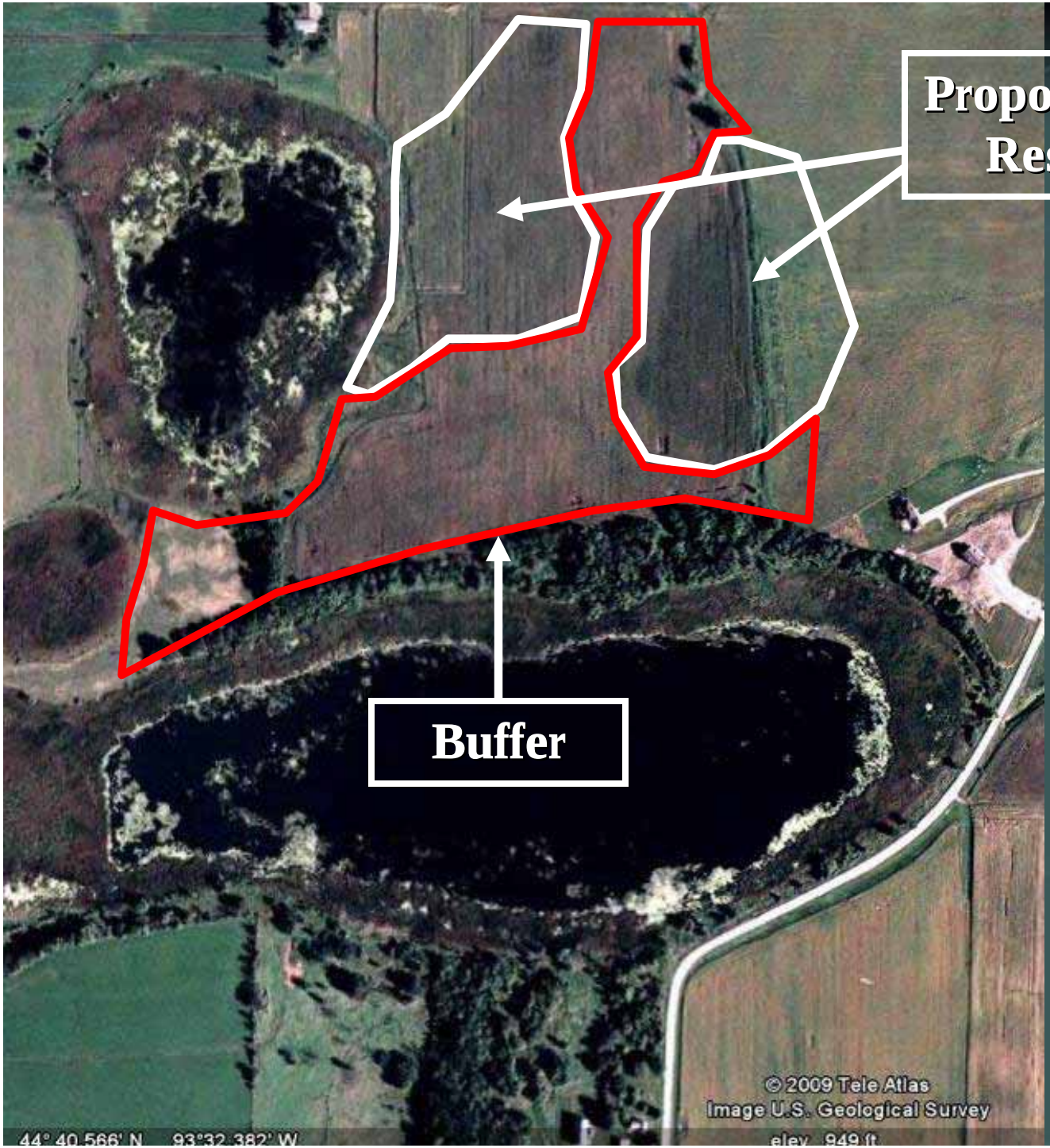
Where are some areas you could deviate from the base requirements?



Allowing little or no buffer on the downstream side in order to obtain more buffer in areas of concentrated flow may be a desirable exchange.

If wildlife habitat is our goal, connectivity to other habitats can be beneficial to the wetland.





Allowing little or no buffer on the outside edges in exchange for connecting 4 wetlands into one functional unit will provide significant habitat benefits both for the replacement wetlands and the existing wetlands.

Subp. 8, Timing of Replacement

- "Replacement of wetland function and value must be completed in advance of or concurrent with the actual wetland impact.
- Replacement is in advance if the replacement is:
  - (1) approved wetland bank credits withdrawn before the impact; or
  - (2) project-specific replacement for which construction has been certified and the first monitoring report of the first full growing season following construction certification has been submitted according to part 8420.0810, and the replacement meets all goals and performance standards applicable to that development stage of the replacement site."

Subp. 9. Financial Assurance

- For wetland replacement that is not in advance, a financial assurance acceptable to the LGU must be submitted to, and approved by, the LGU to ensure successful replacement. The LGU may waive this requirement if it determines the financial assurance is not necessary to ensure successful replacement.

- Submittal of the financial assurance is the default. The LGU must have sufficient evidence and rationale to determine the financial assurance is not necessary to ensure successful replacement in order to waive it (on a case-by-case basis).

Questions:

- Why require a financial assurance?
  - A financial assurance is necessary to ensure that replacement wetlands are constructed as proposed, and that the public value of impacted wetlands is adequately replaced. Current WCA enforcement mechanisms are often inadequate in these situations.
- Why is it only required when not in advance?
  - The purpose of a financial assurance is to limit risk. Projects where construction has been certified and wetland parameters have been established have a significantly reduced risk of failure.
- Is it required for banking?
  - No, banking is in-advance. Risk is reduced by the credit allocation schedule – if it is not successful, credit will not be allocated.

Forms of a Financial Assurance

- Examples of Financial Assurance:
  - Letter of credit
  - Performance Bond
  - Cash
- Letter of credit or bond:
  - To collect, you could have to go through the applicant's banking institution which will take time and work.
  - Be mindful of expiration dates!

- **Consult with your attorney to determine the best financial assurance mechanism for your situation!**

How much is Adequate?

Here are some things to consider:

- Cost of bank credits – be mindful of inflation!
- Construction costs.
- Level of risk (of project failure or applicant follow-through).
- Difficulty of creating/restoring the wetland.
- Amount of wetland being replaced.
- The assurance amount should be reasonable and justifiable.
- While every situation is different, each LGU should develop some standard method or policy to determine the proper amount for each individual case. Treat everyone the same and don't be arbitrary.

Use of Financial Assurance

- The financial assurance may be used to cover costs of actions necessary to bring the project into compliance with the approved replacement plan specifications and monitoring requirements.

- The financial assurance does not serve as an in-lieu fee and is not a substitute for enforcement, but may be used for repair, construction, vegetation establishment and management, maintenance, monitoring, or other actions the LGU determines necessary to ensure adequate replacement.

Use of Financial Assurance (cont'd)

- Before drawing on the financial assurance, the LGU must provide written notice to the landowner stating the actions necessary to bring the replacement project into compliance and that the landowner has 30 days to complete the actions, after which the LGU will use the financial assurance to gain compliance.

- Use of the financial assurance by the LGU may be appealed by the landowner within 30 days after the date on which the notice is mailed, according to part 8420.0910.

Release of Financial Assurance

- The LGU may release a portion of the financial assurance upon successful completion of construction, **but must retain a sufficient amount to ensure successful vegetative establishment and completion of the monitoring requirements.**
- Within 60 days of certification of successful replacement and completion of monitoring according to part 8420.0720, subpart 2, the LGU must release any remaining financial assurance submitted by the applicant, provided all other conditions of the approval are met.