

PROCESS MODEL FOR EQIP-FUNDED
**CONSTRUCTED
WETLAND**



WHAT IS A CONSTRUCTED WETLAND?

A constructed wetland is a shallow pool that filters sediment, nitrate, and other nutrients while also offering flood mitigation and habitat benefits. Constructed wetlands can be specifically designed for agriculture landscapes to intercept drainage tiles, treating the water, before releasing it back into a tile line, ditch, or stream. According to the Iowa Nutrient Reduction Strategy, wetlands remove, on average, 52% of nitrate that passes through it.



BENEFITS OF CONSTRUCTED WETLANDS

Wetlands provide many benefits to the landowner, local community, and society including:

- Low maintenance
- Long life-span
- Habitat for terrestrial, migratory, and aquatic species
- Improved water quality
- And, they're beautiful!

A CONSTRUCTED WETLAND WORKS BEST IN AREAS WITH:

- 200+ acre drainage area of primarily tile drained row crop acres
- 0.5% to 2% pool to drainage area ratio (e.g. for a 200 acre drainage area = 1 to 4 acre wetland pool)
- At least 75% of the wetland pool is less than 3 feet deep
- Suitable soils – not too sandy/gravelly
- Wetland construction shall not negatively impact drainage rights of upstream and downstream land

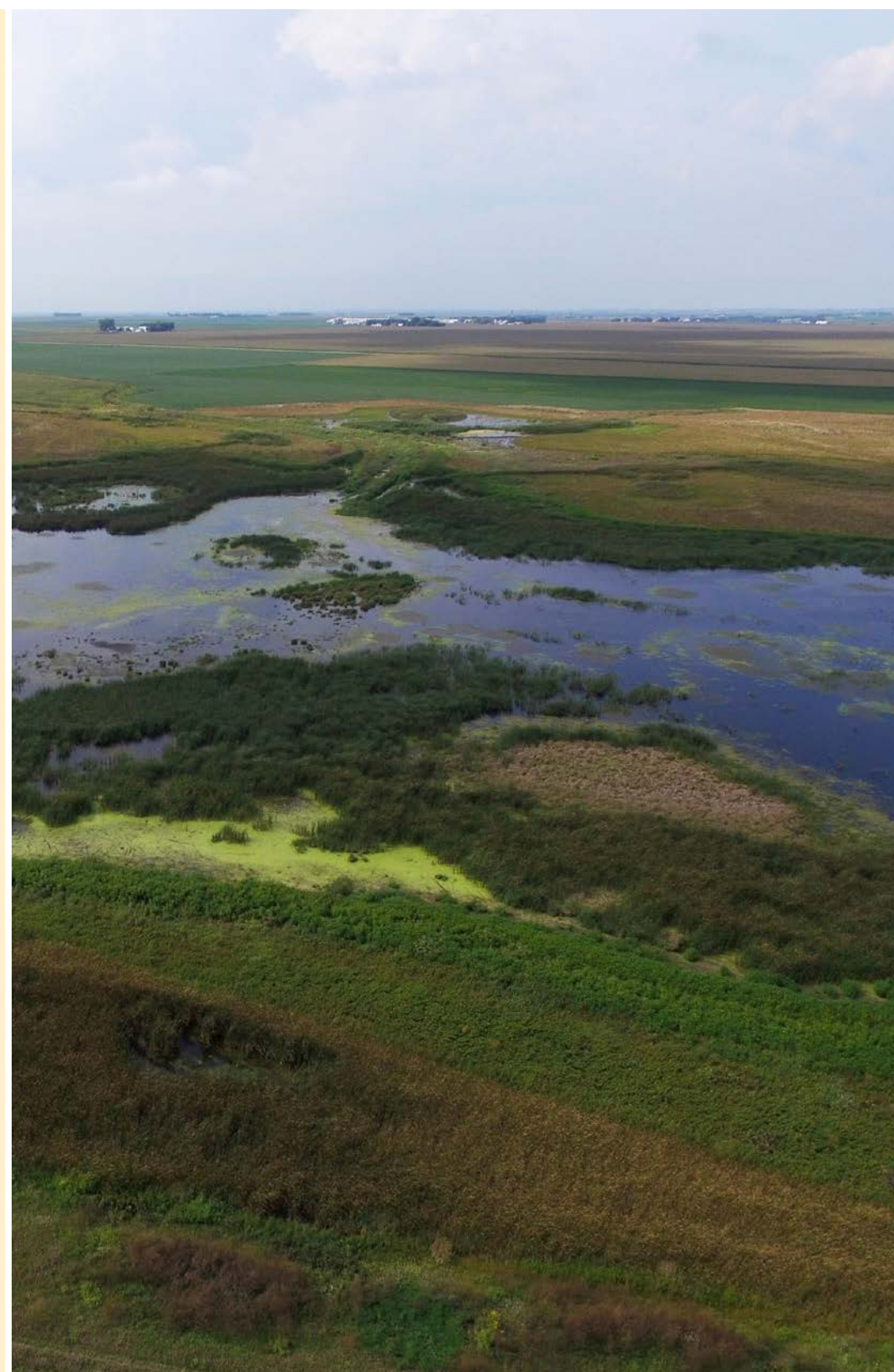
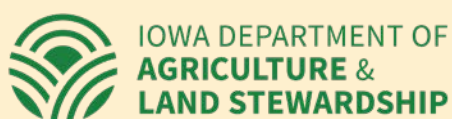
Still deciding if a wetland is right for you? Consult the [Whole Farm Conservation Best Practices Manual](#), which includes a decision support tool for landowners (pg. 46-47).

Photo credit: Lynn Betts

THE ENVIRONMENTAL QUALITY INCENTIVE PROGRAM (EQIP) is a voluntary conservation effort that provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, increased soil health and reduced soil erosion and sedimentation, improved or created wildlife habitat, and mitigation against increasing weather volatility.

The Iowa Department of Agriculture and Land Stewardship manages Iowa's land stewardship and agriculture programs for the good of both city and rural Iowa residents.

The Soil and Water Conservation Society is the premier international organization for professionals who practice and advance the science and art of natural resource conservation.



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KEY

- decision point
- delays possible
- landowner's signature required
- keystone *A keystone step must be completed before the process can move forward.*

1 GATHER INFORMATION takes ~3 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Conceptual designs and payment scenarios prepared. Sites prioritized. Gather site information from SWCD. Contact LO.	> 1 month	IDALS
Landowner meeting: LO signature on IP-1WQI forms and Known Deed Restrictions; locate wetland determination, abstract.	> 1 month	IDALS
NRCS initiates wetland determination (if needed).	> 1 month	NRCS and Landowner

2 PRELIMINARY DESIGN takes ~4 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Share Engineering Request for Proposals (if NRCS not designing). Select engineer.	< 1 month	IDALS Contract Manager
Introductory meeting with LO, engineer, program staff to locate information on tile maps, access locations, soils, boundaries, wetland determination. LO confirms interest in wetland.	> 1 month	IDALS
Collect site specific information including topographic survey for preliminary design. Determine if site meets program criteria: CREP or WQI/EQIP.	< 1 month	IDALS & Engineer
Initiate EQIP application, finalize CPA-52 (includes wetland determination).	> 1 month	NRCS
Develop preliminary design and construction cost estimate.	< 1 month	Engineer
LO, impacted neighbors, SWCD staff, NRCS, engineers, IDALS meet to review design, negotiate easement boundary. Sign EQIP application. IDALS shares direct deposit information with NRCS.	> 1 month	NRCS & IDALS

3 REVISE EASEMENT takes ~2 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Revise easement boundary based on LO feedback. Provide updated shapefile, total easement acres to NRCS. EQIP contract updated.	< 2 weeks	NRCS & IDALS
NRCS determines associated practices and scenarios.	< 2 weeks	NRCS
Order abstract update from local title service provider. Send updated abstract to attorney general to provide title opinion.	< 1 month	IDALS

4 FINALIZE PERMITTING, EASEMENT, AND FUNDING CONTRACT takes ~4 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Submit 401/404 packet to the Iowa Dept. of Natural Resources, state which Regional Permit (33 or 39) you need from the US Army Corps of Engineers.	< 1 month	IDALS <i>Completed CPA-52 needed for this task.</i>
EQIP contract signed.	< 1 month	NRCS
Pre-survey meeting on site with LO to complete legal survey and finalize easement boundary. LO signs assignment of payment.	> 1 month	Engineer <i>Assignment of payment cannot be signed without finalized EQIP contract.</i>
If LO not present at previous meeting, then a post-survey meetings on site w/LO needs to be held to review survey.	> 1 month	Engineer

5 FINAL DESIGN AND EASEMENT takes ~4 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Complete final design.	< 1 month	Engineer
NRCS & IDALS reviews final design.	< 1 month	NRCS & IDALS
Prepare and send floodplain permit application to Iowa Dept. of Natural Resources for approval (if applicable).	> 1 month	IDALS <i>Task can only complete once final design is complete.</i>
Once title received: address comments.	> 1 month	IDALS
Easement signed by LO.	> 1 month	IDALS
Abstract updated by title company to reflect easement. Final abstract reviewed by AG.	< 2 weeks	IDALS
Acquire W9 and GAX form from LO so they can be paid for easement: submit to accounting for payment.	< 2 weeks	IDALS <i>Task can only be completed after receiving abstract review from AG.</i>

6 CONSTRUCTION AND FINAL PAYMENTS takes ~4 MONTHS

TASK	DURATION	RESPONSIBLE PARTY
Develop construction bid.	< 2 weeks	IDALS Contract Manager
Pre-bid meeting with engineer, contractor, IDALS – LO invited.	< 2 weeks	IDALS Contract Manager
Bid opening: IDALS selects lowest bid. Contract signed.	< 2 weeks	IDALS
Pre-construction meeting with LO, contractor, IDALS, and engineer.	> 1 month	IDALS Contract Manager <i>Construction cannot begin without a signed EQIP contract.</i>
Construction.	> 1 month	Engineer
Construction checkout.	< 2 weeks	Engineer
Structure, channel and buffer seeding.	< 2 weeks	Engineer
NRCS certification and reimbursement to IDALS.	< 1 month	NRCS
IDALS provides EQIP receipt of payment to LO for tax purposes.	< 2 weeks	IDALS

COMMONLY ASSOCIATED NRCS PRACTICES AND SCENARIOS WITH AN EQIP CONTRACT NUTRIENT REDUCTION CONSTRUCTED WETLAND

- Practice 656 Constructed Wetland – Scenario #2 Constructed Wetland, Light Planting (Pool Area Only)
- Practice 410 Grade Stabilization Structure – Scenario #13 Open Flow Drop Spillway-High Overfall or Sheet Pile
- Practice 327 Conservation Cover – Scenario #2 Native Species or Scenario #4 Pollinator Habitat
(Consider using Income Forgone if row crop acres are retired)
- Practice 587 Structure for Water Control – Scenarios dependent on design
- Practice 606 Subsurface Drain – Scenarios dependent on design
- Practice 620 Underground Outlet – Scenarios dependent on design

ACRONYMS

- AG:** Attorney General
- CREP:** Conservation Reserve Enhancement Program (this is another state/federal funding source for conservation)
- CPA-52:** This is the National Environmental Evaluation Worksheet. Basically it is the first step needed in receiving funding from the NRCS—it is often referred to as “conservation planning”
- EQIP:** Environmental Quality Incentives Program (a federal funding source for conservation)
- IDALS:** Iowa Department of Agriculture and Land Stewardship
- LO:** Landowner
- NRCS:** Natural Resources Conservation Service (a part of the US Department of Agriculture)
- SWCD:** Soil and Water Conservation District
- WQI:** Water Quality Initiative (a state-run funding initiative for conservation practices that is managed by IDALS)

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