



Natural Resources Conservation Service  
210 Walnut Street, Room 693  
Des Moines, IA 50309-2180

October 8, 2009

IOWA INSTRUCTION 440-381, SECOND EDITION – EMERGENCY WATERSHED  
PROTECTION PROGRAM – FLOODPLAIN EASEMENT  
(EWP-FPE) RESTORATION GUIDANCE FOR IOWA

Part 381.0 PURPOSE

To distribute EWP-FPE Restoration updated guidelines.

Part 381.1 SCOPE

These instructions will replace the First Edition that was emailed out on September 29, 2009, and will be followed to restore EWP-FPE.

Part 381.2 FILING INSTRUCTION

This Iowa Instruction will be posted on the Iowa NRCS Employee Website, which can be accessed at <http://www.ia.nrcs.usda.gov/intranet/> under the Iowa NRCS eDirectives System section.

Part 381.3 EXHIBITS

/s/Roberta Moltzen, Acting  
Richard Sims  
State Conservationist

Attachment

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## IOWA INSTRUCTIONS 440-381 – Emergency Watershed Protection Program— Floodplain Easement (EWP-FPE) Restoration Guidance for Iowa

### 1. PURPOSE:

To distribute EWP-FPE Restoration guidelines.

### 2. EXPLANATION:

This guidance is to be followed to restore all Emergency Watershed Protection Program—Floodplain Easement (EWP-FPE) sites in Iowa. General national guidance for EWP implementation (including restoration) can be found in Circular No. 2 of the EWP Manual.

Once the landowner has signed the Option Agreement to Purchase (OATP), and the application has moved towards the closing process, the final restoration plan should be developed, including all necessary field surveys and engineering designs that the State Conservationist (STC) determines are needed to ensure that there is an accurate estimate of restoration costs. Restoration on floodplain easements will include all necessary conservation practices, measures and activities required to restore the floodplain functions and values to the natural conditions to the greatest extent practicable. Any restoration of wetlands should be restricted to the wetland type(s) that were present in the natural conditions, if any. Restoration will not be implemented when the primary purpose is wetland restoration or maximizing wildlife habitat benefits.

Removal of existing structures; such as dikes, fences, and incidental farm buildings; is an allowable restoration practice, if necessary to provide for ability of the floodplain to properly function during flood events and may be cost-shared. Cost-share for restoration will be 100 percent of the actual cost of installing restoration practices.

Planners (or teams) will be planning the vegetative and engineering components of the restoration plan. The plan will be completed in Customer Service Toolkit (CST) with an ArcMap generated plan map (See Exhibit 1). The plan and map must be completed as accurately as possible as we will be using these maps and plans to determine the contract deliverables for type of work to be completed, quantities, locations, estimated cost, etc. When developing the Toolkit plan, make sure to identify the EWP cost-share practices and to use established mapping conventions. The EWP identified practices will print out on the Conservation Plan of Operations in Toolkit. Additional Toolkit planning instructions are in Exhibit 2.

The implementation of the restoration plans will be completed using federal contracting procedures. The plan is to group multiple individual easements into a single contract to reduce the total number of contracts. If you have a number of easement properties in the same vicinity please let the State Office Easement Programs Team (EPT) know which ones may be possible for combining.

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The Contracting Staff at the State Office will be taking care of the advertising, bidding, awarding the contract, and any negotiation process. Once the contract is awarded, the contractor or his representative will complete the work in a specified time frame. At this point, any changes to the contract will result in delays and expense. Therefore, it is extremely important to do a good job of planning with the landowner and other necessary staff such as engineers to determine precisely what action needs to be taken to ensure that the contractor completes the work according to the contract. Once the contract is awarded, the landowner is a non-participant and cannot change the work. That is why the planning process must be used up front to ensure the landowner knows exactly what to expect.

After completion of the Conservation Plan in Toolkit, the Conservation Plan needs to be completed by field offices and submitted to EPT along with the corresponding restoration plan map, Environmental Evaluation Worksheet (Form CPA-52), and any necessary additional Cultural Resources Consideration information. These restoration plans will need to be connected to that easement record in the National Interim Database Tool. Area easement specialists will need to assist the EPT in connecting these plans in the National Database Tool.

### **Vegetative Treatment of Floodplain Easement Areas**

The vegetative restoration planting mixes consist of plants that are readily available and are intended to provide some diversity of grasses and forbs or give hard mast trees a head start on natural succession. The seeding mixes and trees species have been predetermined and no substitutions will be allowed.

There are 4 options of vegetative treatments. They are:

- A wet seeding mix (for the wetter area) (327 Conservation Cover),
- Dry seeding mix (for the drier areas) (327 Conservation Cover),
- Tree planting (seeding in clumps for environmental benefits – not forestry production) (612 Tree/Shrub Establishment), or
- No treatment needed (if area is already grown up in vegetation or Reed Canary Grass is currently a dominant or co-dominant in the area) (327 Conservation Cover).

The wet and dry seeding mixes are to be used in fields that are in agricultural production. Fields that have adequate existing herbaceous vegetation to protect the soil from erosion may be planted or left to natural succession. Planted perennial vegetation (hay, pasture, CRP, etc.) shall not be seeded to these mixes.

Site preparation for the seeding mixes will be as follows: The site is in agricultural production and was last planted to corn or has a volunteer stand of weeds or herbaceous vegetation. The field will be disked, field cultivated, broadcast seeded, and culti-packed. If the site was last planted to beans site prep will consist of field cultivation, broadcast seeded, and culti-packed. No soil amendments or fertilizer will be used.

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The wet mix will consist of 10 herbaceous species as follows:

<i>Scirpus atrovirens</i>	Dark Green Bulrush
<i>Carex stricta</i>	Tussock Sedge
<i>Carex vulpinoidea</i>	Fox Sedge
<i>Eupatorium perfoliatum</i>	Boneset
<i>Symphotrichum novae-angliae</i>	New England aster
<i>Eupatorium maculatum</i>	Spotted Joe-pye-weed
<i>Helenium autumnale</i>	Sneezeweed
<i>Pycnanthemum virginianum</i>	Common mountain mint
<i>Thalictrum dasycarpum</i>	Purple meadow-rue

And one of the following:

<i>Glyceria striata</i>	Fowl manna grass
<i>Leersia oryzoides</i>	Rice cutgrass
<i>Spartina pectinata</i>	Prairie cordgrass

The dry mix will consist of 16 species as follows:

<i>Elymus canadensis</i>	Canada wild rye
<i>Panicum virgatum</i>	Switchgrass
<i>Pascopyron smithii</i>	Western Wheatgrass
<i>Andropogon gerardii</i>	Big bluestem
<i>Bouteloua curtipendula</i>	Side-oats grama
<i>Schizachyrium scoparium</i>	Little bluestem
<i>Sporobolus heterolepis</i>	Prairie dropseed
<i>Chamaecrista fasciculata</i>	Partridge pea
<i>Monarda fistulosa</i>	Wild bergamot, horsemint
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Verbena stricta</i>	Hoary vervain
<i>Echinacea pallida</i>	Pale coneflower
<i>Heliopsis helianthoides</i>	Ox-eye
<i>Ratibida pinnata</i>	Gray-headed coneflower
<i>Veronicastrum virginicum</i>	Culver's Root
<i>Dalea purpurea</i>	Purple prairie clover

Tree planting can be an option in any easement where there is an adequate seed source of tree species present or in areas where there is already newly established volunteer trees in the floodplain. Tree planting shall be in clumps of 25 bare rooted seedlings planted on a ¼ acre (approximately a 20 x 20 spacing). There will be one clump for each 2.0 acres. The purpose of this is to establish hard mast species in areas throughout the floodplain to add diversity with the early light seed volunteer species. We will not plant trees in Reed Canary Grass. The species that will be planted are Bur Oak, Pin Oak, and Swamp White Oak.

“No treatment” is to be used for areas that the planner recognizes that the herbaceous or tree plantings would not be successful. “No treatment” may include areas that are already established to vegetation, planted or volunteered, areas where Reed Canary Grass is expected to overwhelm any plantings that we attempt or other areas where plantings are likely to fail.

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The easement may have any one or all four of the vegetative options. The floodplain restoration prescription is very site specific and your use of professional judgment to determine the most effective treatment is paramount.

All EWP-FPE properties will be planned and the plan will be submitted to the EPT. If there are plans that require no action these plans will not be forwarded to the Contracting Section. For example, if you have a floodplain easement area that is a Reed Canary Grass pasture, that the plan is for “No treatment” and there is no planned engineering work (a walk away site) the EPT will simply file the plan in the easement file and not send a copy to Contracting and report restoration completed.

### **Additional Restoration Practices**

#### Fences (foot) (382 Fence)

Fences will be put into the restoration plan only where NRCS has determined necessary for the restoration and protection of the easement area. The fence is to be placed on easement boundaries and adjacent to livestock pastures ONLY. Fences must not impede the reach and flow of the river. NRCS could cost-share to remove a non-useful fence within the easement area (see debris removal). The NRCS engineering specification will be used for all fences (4 wires, lower wire non-barb, upper 3 wires barbed, with minimum of one gate).

#### Debris Removal (lump, cyd, area, ft, etc.) (500 Obstruction Removal)

Debris (natural or man-made) that is blocking the reach and flow of the floodplain shall be removed and addressed with the appropriate construction specification paid for by NRCS. There is a construction specification to use for this practice.

#### Wells Caps (351 Well Decommissioning)

All old wells on the easement area will be capped and secured in accordance with the state law by the landowner at no cost to NRCS before easement closing. NRCS will not cost share on this practice.

#### Private Utilities

All private power lines (above ground utilities) will be removed by the landowner. Each removal will be evaluated on a case-by-case basis to determine who shall be responsible for the cost.

#### Existing Drainage Tiles (foot) (500 Obstruction Removal)

If NRCS determines it necessary, any known existing drainage tiles may be broken when the effects will only occur within the easement area. Drainage tiles that impact or have the potential to impact land neighboring an easement (if the adjacent land is not under any type of conservation protection) will not be manipulated/broken.

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**Dike/Levee Work (cyd) (500 Obstruction Removal)**

NRCS Restoration Planning Teams should evaluate all levees and cross levees to determine the feasible type of work necessary to restore the natural functions of the floodplain. All levee work should be designed to minimize (if at all) any non-natural flooding on adjacent landowners. In other words, any work shall not make adjacent lands not under conservation protection any wetter. All predicted off-site impacts shall be documented in the easement files (field and State Office). The requirement to restore natural flood plain function also applies to levees/dikes which have been repaired or rebuilt after the flood event. Any levee work shall be identified in the restoration plan and the appropriate engineering specifications will be used.

Any fill produced from restoration work will not be placed in any hydric soil areas on the easement area. The Restoration Planning Team will determine the location of any fill disposal sites and these sites shall be identified in the conservation plan. Options for fill disposal sites include but are not limited to: placing on a portion of an existing levee where it will not impede the reach and flow of the floodplain and/or let landowner retain the fill for their private use and it is moved to a reasonable distance off of the easement area.

**Supplemental Restoration**

Circular 2 (EWP Manual) states, “Restoration will not be implemented when the primary purpose is wetland restoration or maximizing wildlife habitat benefits.” Any supplemental restoration going above and beyond from the restoration practices mentioned above will not be part of the restoration plan.

**Cropping**

The ARRA funded easements have special deadlines attached to the funding. All ARRA easements must close before February 3, 2010. At this time the easement becomes the federal government’s which includes all cropping rights. Therefore, cropping will NOT be allowed on any/all closed/perfected ARRA easements after the date of closing and the restoration work will proceed. This potentially is how cropping rights on regularly funded EWP easements will also be interpreted and implemented.

The NRCS will not proceed with the easement process if participants are not willing to agree to the restoration requirements.

Approved By:

Date:

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October 10, 2009