

Normal Circumstances – Defined and Clarified

Steve Eggers

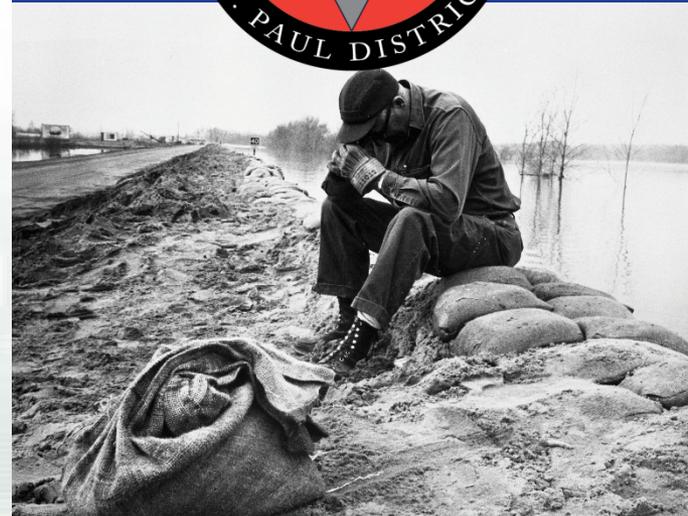
Senior Ecologist

St. Paul District

March 9, 2016



US Army Corps of Engineers
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Two-Step Process

Step 1: Delineate Wetlands, if Present, Within a Site

Every
Data
Sheet

Normal Circumstances?
Normal Environmental Conditions?
Significantly Disturbed (Atypical Situations)?
Problem Area?



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Wetland Definition (1977)

- Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions

HISTORY: In early years of implementing the Section 404 regulatory program, wetland identification was based on vegetation – there were no delineation manuals/3-parameter approach. Cases arose where wetland vegetation was removed (plowed under, burned off, herbicided, etc.) in an attempt to evade wetland regulations. Corps/EPA then adopted the approach of determining whether the area in question would support dominance by wetland vegetation under normal circumstances.



Answer the Question

WETLAND DETERMINATION DATA FORM - Midwest Region

| | | | | | |
|---|--------|----------------|---------------------------------------|--|--------|
| Project/Site: | | City/County: | | Sampling Date: | |
| Applicant/Owner: | | | State: | Sampling Point: | |
| Investigator(s): | | | Section, Township, Range: | | |
| Landform (hillslope, terrace, etc.): | | | Local relief (concave, convex, none): | | |
| Slope (%): | Lat: | | Long: | | Datum: |
| Soil Map Unit Name: | | | NWI Classification: | | |
| Are climatic/hydrologic conditions of the site typical for this time of the year? | | | | (If no, explain in remarks) | |
| Are vegetation | , soil | , or hydrology | significantly disturbed? | Are "normal circumstances" | |
| Are vegetation | , soil | , or hydrology | naturally problematic? | present? | |
| SUMMARY OF FINDINGS | | | | (If needed, explain any answers in remarks.) | |

If yes, data collection is based on current conditions.

If no, data collection is based on conditions that would exist in absence of recent disturbance(s).



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Normal Environmental Conditions vs. Normal Circumstances

WETLAND DETERMINATION DATA FORM - Midwest Region

| | | | |
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| Investigator(s): | Section, Township, Range: | | |
| Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): | | |
| Slope (%): | Datum: | | |
| Soil Map Unit Name: | NW1 Classification: | | |
| Are climatic/hydrologic conditions of the site typical for this time of the year? | | (If no, explain in remarks.) | |
| Are vegetation | , soil | , or hydrology | significantly disturbed? |
| Are vegetation | , soil | , or hydrology | naturally problematic? |
| | | Are "normal circumstances" present? | |
| SUMMARY OF FINDINGS (If needed, explain any answers in remarks.) | | | |
| Hydrophytic vegetation present? | N | Is the sampled area within a wetland? | |
| Hydric soil present? | | If yes, optional wetland site ID: | |
| Indicators of wetland hydrology present? | | | |
| Remarks: (Explain alternative procedures here or in a separate report.) | | | |

Normal Environmental Conditions?

Normal Circumstances?

Normal Environmental Conditions vs. Normal Circumstances

- **Short-term:** “normal environmental conditions” refers to the climatic conditions of the current year and growing season
- **Long-term:** “normal circumstances” refers to the multiple-year/decades-long condition of the site



Normal Circumstances Key

- 1. Soils, vegetation and hydrology are undisturbed.....**NC**
- 1. Physical alteration(s) to soils, vegetation and/or hydrology has occurred.....2
 - 2. Physical alteration(s) to soils, vegetation and/or hydrology is minor, i.e., insufficient to remove or obscure field indicators...
.....**Normal Circumstances**
 - 2. Physical alteration(s) to soils, vegetation and/or hydrology is more than minor (“significantly disturbed” is checked on datasheet).....3



Normal Circumstances Key

3. Physical alteration(s) is legally established, maintained and represents the long-term condition of the site; OR is a newly-authorized physical alteration (e.g., a permitted fill, new concrete dam).....**Normal Circumstances**
3. Physical alteration(s) is due to:
- a. an unauthorized or illegal activity;
 - b. done with intent of evading wetland regulations;
 - c. total or partial clearing of vegetation, or selective removal of veg
 - d. presence of a crop, tree farm, improved pasture, managed veg
 - e. destruction of hydric soil field indicators by cultivation, deep ripping, etc.;
 - f. irrigation or pumping of surface or groundwater for agriculture;
 - g. a major natural event (e.g., a river changes course).....
-**NOT Normal Circumstances**

Disturbed (Atypical Situations)



- ▶ One or more parameters altered or absent due to recent human activity or natural event

Filling, artificial drainage, stream channelization, mechanized landclearing, levee construction, mowing, cropping, plowing, logging, change in river course, etc.



Degree of Disturbance(s)

WETLAND DETERMINATION DATA FORM – Midwest Region

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Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

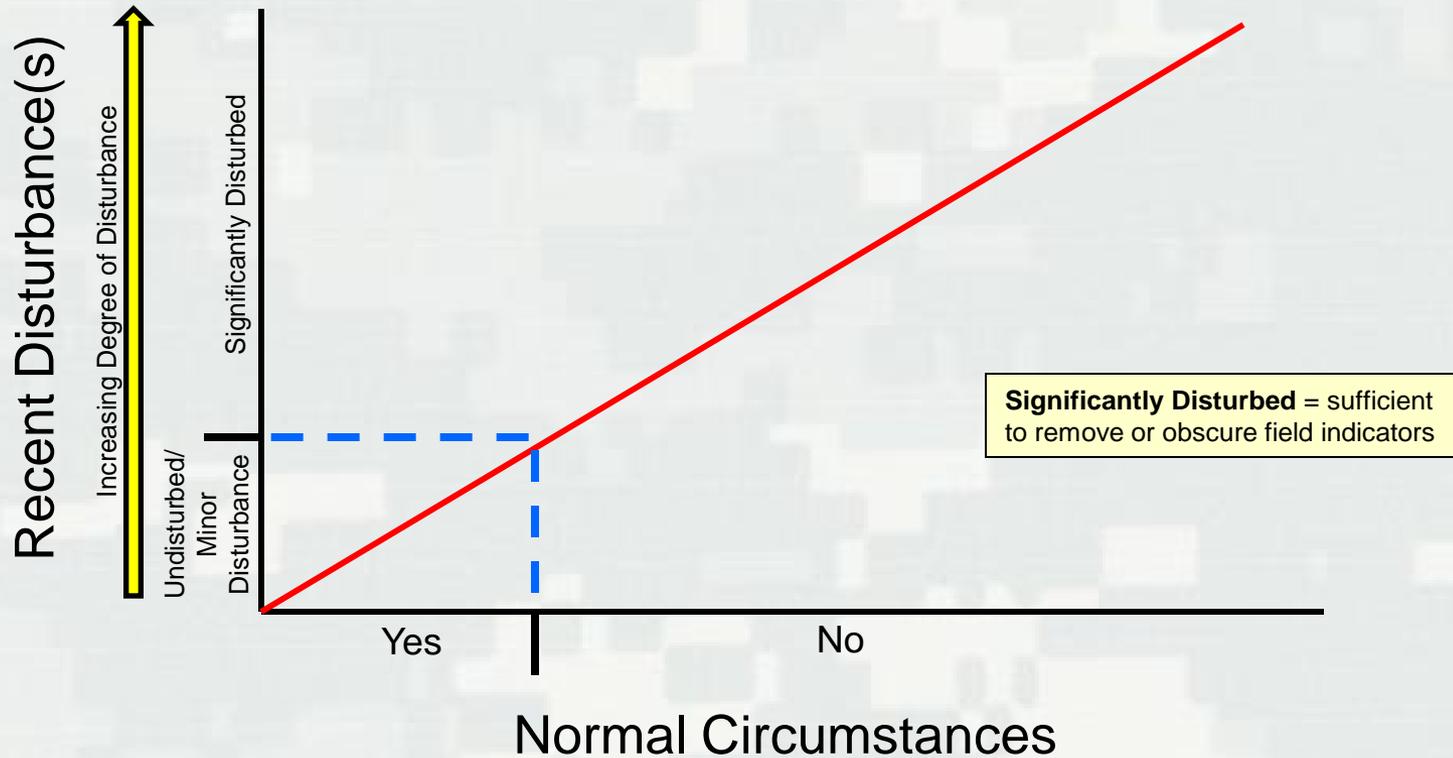
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

Significantly Disturbed = sufficient to remove or obscure field indicators



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Relationship of Normal Circumstances and Recent Disturbance(s)



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Normal Circumstances

- The full range of **pristine to highly disturbed** conditions may constitute the normal circumstances
- The **long-term condition** of a site including any authorized or other legal alterations, such as highways, dams, and other relatively permanent infrastructure and development
- The **extent, duration** and **relative permanence** of the physical alteration(s) are key
- **Maintenance** is a factor – if a physical alteration (e.g., ditch system) is **abandoned** and wetlands reestablish, the NC is wetlands
- The conditions indicated by the soils and hydrology normally present on a site, in cases where the vegetation has been altered or removed

Extent and Relative Permanence Test



Normal Circumstances

- Alterations that occurred before implementation of the Clean Water Act (1972).
- Alterations that were **authorized, exempt**, or did not require authorization.
- Hydrologic modifications, such as functioning ditches or subsurface drains, that were **installed legally**, are **relatively permanent**, are **maintained**, and operate by gravity without any artificial input of energy or manpower.
- Ongoing hydrologic manipulation that is permanent and non-discretionary, such as pumping of surface or groundwater for municipal water supply, done under a court order, or required for public safety.
- A site with **undisturbed conditions**, including those wetlands identified as problem areas



Not Normal Circumstances



Recent, unauthorized fill that buried natural vegetation and native soils, and altered hydrology



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Normal Circumstances

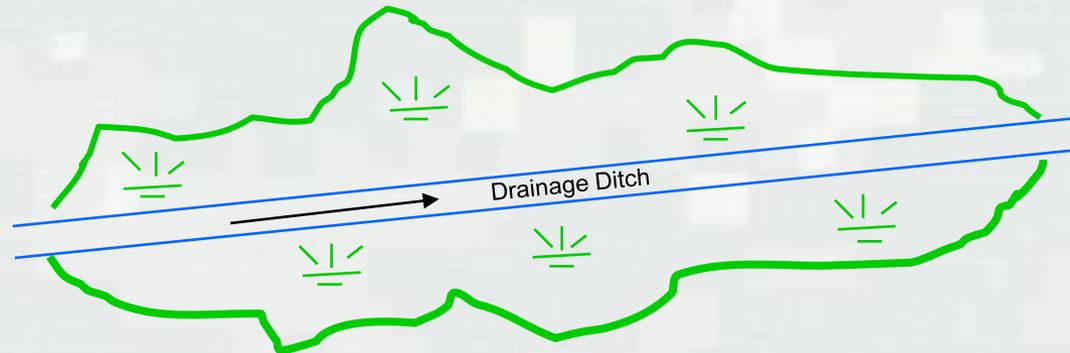


Authorized wetland fill meets the “extent and relative permanence test” -- establishes a new **Normal Circumstance**

3. Physical alteration(s) is legally established, maintained and represents the long-term condition of the site; OR is a newly-authorized physical alteration (e.g., a permitted fill, new concrete dam).....**Normal Circumstances**



Normal Circumstances - Hydrology



Example A: Ditch legally constructed in 1950s and maintained since = ditch is established as **Normal Circumstances**. Partially drained is the normal circumstance for hydrology.

Example B: Ditch constructed last year; unauthorized sidecasting of dredged materials in wetlands = **NOT Normal Circumstances**



Normal Circumstances – Soils

- **Normal plowing** (e.g., 8- to 9-inch depth) is not considered a “significant” disturbance to soils if does not remove or obscure field indicators of hydric soils
 - Examples: A1, A12
 - However, other field indicators (e.g., F8, some S indicators (sandy)) would be obscured or difficult to determine
- “Deep ripping” or other methods that disturb and mix soil layers at depths greater than normal plowing are **NOT Normal Circumstances**



Normal Circumstances - Vegetation

Removal of natural vegetation and replacement with a planted crop = **NOT Normal Circumstances**



When natural vegetation has been removed, focus on soils and hydrology. If a site has wetland hydrology and hydric soils, it would support dominance by hydrophytes **under normal circumstances**.



Normal Circumstances - Vegetation

- Removing, manicuring, planting, cropping, or other means of altering vegetation that is more than minor = **NOT Normal Circumstances**



Overgrazed to the extent that alteration of vegetation is more than minor
– including the extreme case shown above where vegetation has been
removed = **NOT Normal Circumstances**



Normal Circumstances - Vegetation



Sample Point – vegetation not disturbed to the extent that dominant species cannot be accurately identified

Light grazing of a sedge meadow – minor disturbance of natural vegetation = **Normal Circumstances**

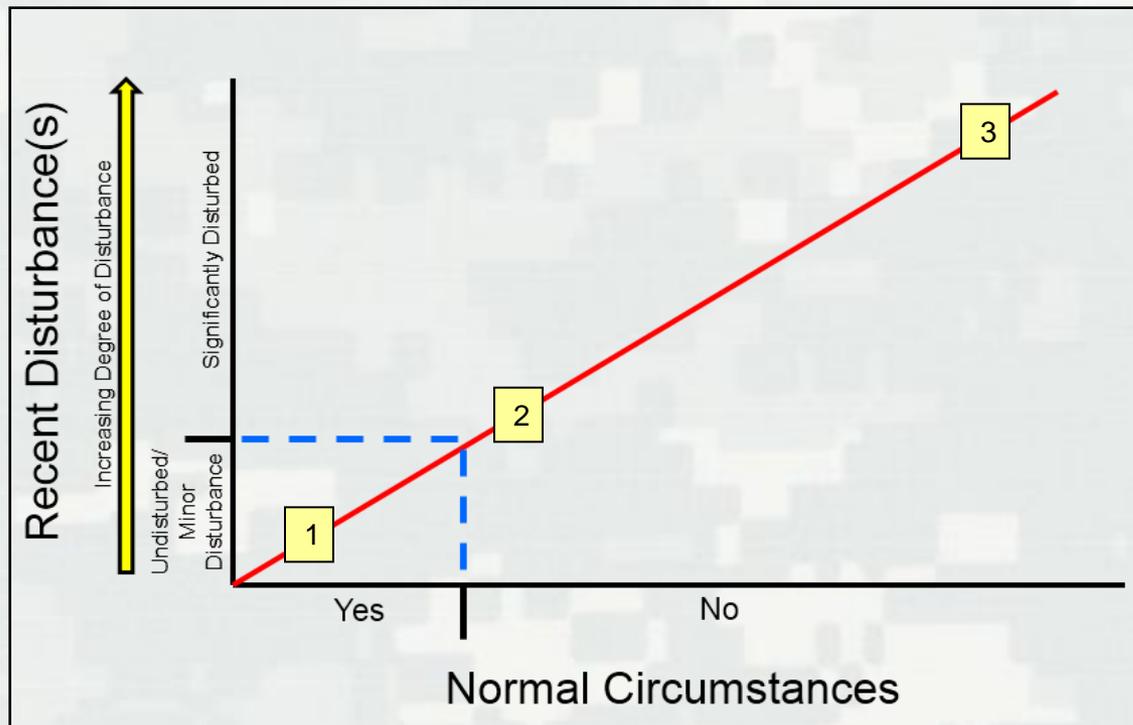
Example of an unimproved pasture = no interseeding, planting, etc.



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Normal Circumstances - Vegetation

What about moderate grazing sufficient to result in a shift of the plant community to species more tolerant of grazing (“increasers”) at the expense of other plant species (“decreasers”)[see Table 10 in Midwest Supplement for examples]. Most cases:
NOT Normal Circumstances. Follow Midwest Supplement guidance.



KEY:

- 1 Light Grazing – Sedge Meadow
- 2 Moderate Grazing
- 3 Overgrazed – Exposed Soils



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Normal Circumstances - Vegetation



Natural vegetation removed and replaced by manipulated/manicured vegetation (seeding, mowing, fertilizing, selective herbicide applications) =
NOT Normal Circumstances



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Problem Areas

ERDC/EL TR-12-1

Environmental Laboratory



US Army Corps of Engineers
Engineer Research and Development Center

Wetlands Regulatory Assistance Program

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region
(Version 2.0)

U.S. Army Corps of Engineers January 2012



Approved for public release; distribution is unlimited.

“Problem Areas” in Regional Supplements:

- ▶ One or more parameters absent due to normal seasonal or annual variability, or permanently due to the nature of the soils or plant species
 - Seasonal wetlands
 - Prairie potholes
 - Red clay parent materials
 - FACU-dominated Wetlands



FACU-dominated wetland



Problem Areas and Normal Circumstances

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Applicant/Owner: _____ State: _____ Sampling Point: _____

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Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____

Slope (%): _____ Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)



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Problem Areas and Normal Circumstances

- **EXAMPLE:** Vernal pools are naturally dry outside of the first few weeks of the growing season = **Normal Circumstances**



Vernal Pool: Late Summer



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Problem Areas and Normal Circumstances

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Are Vegetation _____, Soil _____, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)



Prairie pothole wetland in a drought year



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