

Natural Riparian Resources

Water



Erosion / Deposition



Vegetation

16: Accumulation of chemicals affecting plant productivity and composition is not apparent

Purpose: The intent is to determine if the vegetation is being affected by chemicals in the system.

- Agricultural runoff
- Acid-mine drainage
- Alkalinity/salinity
- Oil/gas

Item 16 is closely associated to items 8, 9, and 18. When item 16 is answered "no," either item 8 or 9 would also be answered "no."



16: Accumulation of chemicals affecting plant productivity and composition is not apparent

16: Accumulation of chemicals affecting plant productivity and composition is not apparent



Stock ponds can
alter water balance
and concentrate
soluble chemicals



16: Accumulation of chemicals affecting plant productivity and composition is not apparent

Accumulation of chemicals...

■ Notes:

- An interdisciplinary team has the option of taking samples for further evaluation should they be unable to adequately answer this question.
- Many natural chemicals occur in wetlands (i.e. phosphates and nitrates) that enhance vegetation production. But excess nutrients can lead to algae blooms, reduction of oxygen in open water systems, and rapid eutrophication.

17: Saturation of soils (i.e., ponding, flooding frequency, and duration is sufficient to compose and maintain hydric soils.

Purpose: The intent is to determine if there is sufficient water available to create or maintain hydric soil characteristics.

Hydric soils are saturated with water from flooding, ponding, or shallow groundwater and have organic peat or muck layers or shallow redox or gley features.

There is a strong relationship between item 17 and items 1, 3, 6, and 10.

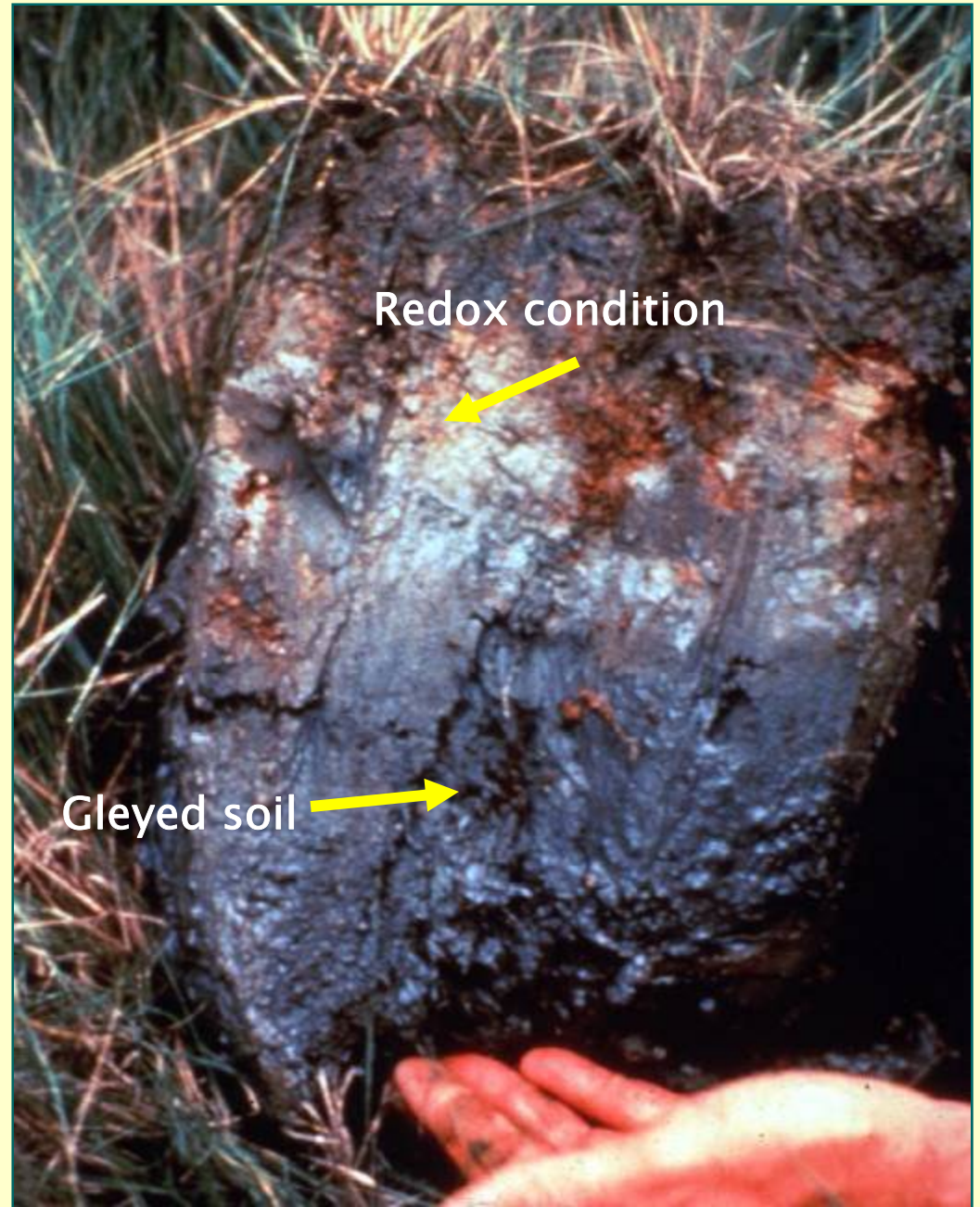
17: Saturation of soils is sufficient to compose and maintain hydric soils.

“Yes”

Wet Meadow Soil

Anaerobic conditions

- The presence of hydric indicators is the easiest way to demonstrate that soil saturation is sufficient to maintain anaerobic conditions.



**Add your own photo
example of a NA, yes,
or no answer, and add
notes pages that set the
context and share it
with the NRST.**

**17: Saturation of soils (i.e., ponding, flooding
frequency, and duration is sufficient to compose and
maintain hydric soils.**

18: Underlying geologic structure/soil material/permafrost is capable of restricting water percolation

Purpose: The intent is to determine whether the underlying material is being maintained.

- Wetlands often have an underlying clay or rock material that causes sites to persist.

**Add your own photo
example of a NA, yes,
or no answer, and add
notes pages that set the
context and share it
with the NRST.**

**18: Underlying geologic structure/soil
material/permafrost is capable of restricting
water percolation**



18: Underlying geologic structure/soil material/permafrost is capable of restricting water percolation

19: Riparian–wetland is in balance with water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Purpose: To determine if erosion and deposition rates are being affected or accelerated by management activities

Some wetlands are depositional areas that fill with sediment over geologic time. The rate of filling can be accelerated by sediment supplies from roads, logging, water diversions, farming, or grazing, if not done properly.

Closely tied to item 4

19: Riparian-wetland is in balance with water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

- **The intent is to identify that water and sediment are being supplied at a natural rate and can function properly**





If a wetland shows no evidence of excessive deposition and is not filling any faster than its normal rate, as a result of excess water or sediment from the watershed, the answer would be “yes.”

Water and sediment...

Indicators of excessive erosion or deposition can include unstable shorelines, deltas extending into a wetland, and loss of open water.

- Add a photo example of a "no" answer

20: Islands and shoreline characteristics (i.e., rocks, coarse and/or large woody material) are adequate to dissipate wind and wave event energies

Purpose: To determine the shoreline stability of those systems that *do not* require live vegetation only.

- Loss of shorelines affect wetlands by lowering water quality, reducing the capacity to hold water, and altering the plant community.



20: Islands and shoreline characteristics (i.e., rocks, coarse and/or large woody material) are adequate to dissipate wind and wave event energies

**Add your own photo
example of a NA, yes,
or no answer, and add
notes pages that set the
context and share it
with the NRST.**

20: Islands and shoreline characteristics (i.e., rocks, coarse and/or large woody material) are adequate to dissipate wind and wave event energies