1. Inundation of lands to provide habitat and refuge for fish and/or wildlife species that require shallow water for at least a part of their life cycle.

- **D.1 (+) Habitat for target species**
  - Critical Area Planting (342)
  - Filter Strip (393)

- **I.1 (-) Habitat fragmentation**
- **I.2 (+) Use of habitat by target species**
- **I.3 (+) Use of habitat by non-target species**

- **D.2 (+) Ponded water (seasonal)**

- **I.4 (-) Habitat for noxious/invasive species (with vegetation management)**
- **I.5 (+/-) Water temperature**
- **I.6 (+) Sedimentation (onsite)**
- **I.7 (-) Sediment-borne contaminants to receiving waters**

- **C.2 (+) Biodiversity**
- **C.3 (+) Recreational opportunities**

- **I.8 (+/-) Nutrients**

- **I.9 (+/-) Water-borne contaminants to receiving waters**
- **C.4 (+/-) Water quality**
- **I.10 (+) Temporary flood storage**

- **I.11 (+) Methane production**

- **C.5 (+/-) Community health and safety**
- **I.12 (-) Organic matter oxidation**
- **I.13 (+) Temporary carbon storage**

- **C.6 (+/-) Income and income stability (individuals and community)**
- **I.14 (+/-) Greenhouse gases**

- **D.3 (+) Anaerobic conditions (during inundation)**
- **D.4 (-) Land available for commercial agricultural production or development**
- **D.5 (+) Cost of installation and maintenance**
- **D.6 (+) Cost of installation and maintenance**

**Initial setting:** Where habitat is needed for wildlife that require shallow water: (1) on lands where water can be impounded or regulated by diking excavating, ditching, and/or flooding; (2) on flood plains area that provide refuge habitats for native fish during high flow periods.

**Note:** Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.