

Appendix I-2

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**WETLAND EVALUATION TECHNIQUE  
SUMMARY EVALUATION RESULTS**

## Appendix I-2

### Wetland Evaluation Technique (WET) Summary Evaluation Results

This appendix presents the summary evaluation results of the Wetland Evaluation Technique (WET) assessment that was conducted for wetlands within the DSA. Terms used in the summary evaluation results are defined below.

#### Definitions:

**Aquatic Diversity/Abundance:** A HIGH rating for an area means that, at least seasonally, the AA supports a notably great on-site diversity of fish or invertebrates (i.e., most trophic groups of secondary consumers with complex food webs). Other aquatic animals (e.g., waterfowl) are covered under other functions.

**Assessment Area (AA):** The Assessment Area is the wetland area that is assessed for functions and values. The AA includes all wetlands within the DSA. The WET assessment was performed by categorizing the various wetlands by hydrologic connection (isolated, containing a channel, or depressional) and dominant plant community (forested, scrub/shrub, or herbaceous). In total, there were nine categories utilized: forested depressional (FORDEP), forested isolated (FORISO), forested with channel (FORCH), scrub/shrub depressional (SSDEP), scrub/shrub with channel (SSCH), herbaceous depressional (HDEP), herbaceous isolated (HISO), herbaceous with channel (HCH), and open water with herbaceous fringe (HFRIN).

**Effectiveness:** Effectiveness is a measure of the probability that a wetland has the capability to perform a function.

**Floodflow Alteration:** Floodflow alteration occurs in those areas where surface water is stored or its velocity is attenuated to a greater degree than typically occurs in a terrestrial environments. No judgment is mad as to the value of such flow alteration, in fact, there may be situations in which reduction off low velocity causes increased flooding due to the flow synchronization.

**Ground Water Recharge:** Recharge AA's or wetlands are considered to be those where: (a) recharge to underlying materials or round water (deep or shallow) exceeds ground water discharge to the wet depression on a net annual basis, and/or (b) the rate of recharge typically exceeds the rate of recharge from terrestrial environments.

**Ground Water Discharge:** Ground water discharge areas are those where the rate of discharge from ground water (deep or shallow) into the wetland exceeds the rate of recharge to the underlying ground water from the wetland on a net annual basis.

**Nutrient Removal/Transformation:** A HIGH nutrient removal/transformation areas are those which retain or transform inorganic phosphorus and /or nitrogen into their organic forms or transform (remove) nitrogen in its gaseous form, on either a net annual basis or during the growing season, and which are generally more effective at doing so than typical upland environments.

**Opportunity:** Opportunity is a measure of the probability that a wetland has the opportunity to perform a function.

**Product Export:** A HIGH production export is the flushing of relatively large amounts of organic plant material (specifically, net annual primary production) from the AA into down slope waters. No judgment is made as to the value off such export; indeed, there may be instances where such export represents a nutrient loss to the exporting system or where such exported material causes water quality problems down slope.

**Qualitative Probability Ratings:** Qualitative probability ratings of HIGH (H), MODERATE (M), and LOW (L) are assigned by this method. These ratings are not direct estimates of the magnitude of a wetland function or value. The ratings are an estimate of the probability that a function or value will exist or occur in the wetland.

**Recreation:** Recreational areas are those that are regularly used for recreational or consumptive activities, which opportunities are otherwise locally deficient as recognized by a local or state recreational plan, or as a major public access point to a recreational waterway.

**Sediment Stabilization:** A HIGH sediment stabilization areas are those which are more effective for binding soil and dissipation erosive forces than are typical upland environments.

**Sediment/Toxicant Retention:** A HIGH sediment/toxicant retention areas are those which physically (or chemically in the case of toxicants) trap and retain on a net annual basis the inorganic sediments and/or chemical substances generally toxic to aquatic life.

**Social Significance:** Social Significance is a measure of the probability that a wetland is of value to society because of its natural features, economic value, official status, and strategic location.

**Uniqueness/Heritage:** Uniqueness/heritage areas include those that, 1) are regularly used by Federal or State endangered or threatened species, 2) owned by an organized conservation group, 3) are included in a statewide listing of historical or archaeological sites, 4) known to have ecological or geological features consistently considered by regional scientists to be unusual or rare for wetlands in the region, 5) represent most or all of this wetland type in the locality, 6) the closest wetland with parking to a nature center, 7) is essential to on-going, long-term environmental research, and/or 8) is within an pristine watershed natural area.

**Wildlife Diversity/Abundance for Breeding:** A HIGH rating for a wetland means that during the breeding season the wetland normally supports a notably great on-site diversity and/or abundance of wetland-dependent birds. This definition does not take into account the contribution of the AA to off-site (regional) faunal richness or the uniqueness/rarity of the species.

**Wildlife Diversity/Abundance for Migration and Wintering:** A HIGH rating for a wetland means that during migration or winter, the wetland normally supports a notably great on-site diversity and/or abundance of wetland-dependent birds.

**Wildlife Diversity/Abundance for Migration and Wintering:** A HIGH rating for a wetland means that during migration or winter, the wetland normally supports a notably great on-site diversity and/or abundance of wetland-dependent birds.

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Summary of Evaluation Results for "FORCH"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "FORISO"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "FORDEP"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "HISO"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "HCH"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

## Summary of Evaluation Results for "HDEP"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "HFRIN"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "SSCH"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

Summary of Evaluation Results for "SSDEP"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.