Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

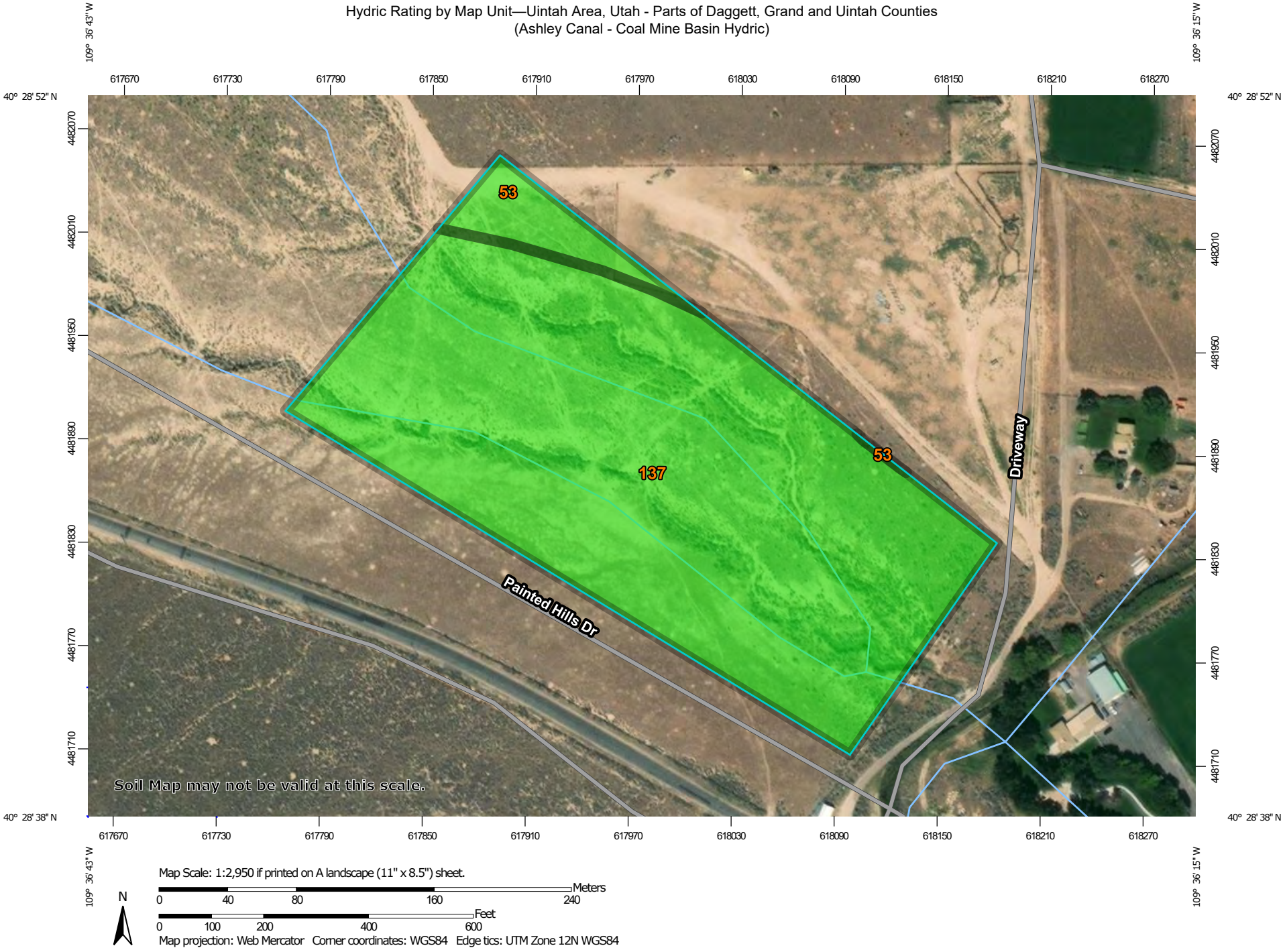
Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Hydric Rating by Map Unit—Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
(Ashley Canal - Coal Mine Basin Hydric)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
Survey Area Data: Version 13, Sep 11, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2009—Sep 2, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
53	Cliff sandy loam, 2 to 4 percent slopes	0	0.9	5.6%
137	Mikim loam, 3 to 15 percent slopes	0	15.1	94.4%
Totals for Area of Interest			**16.0**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

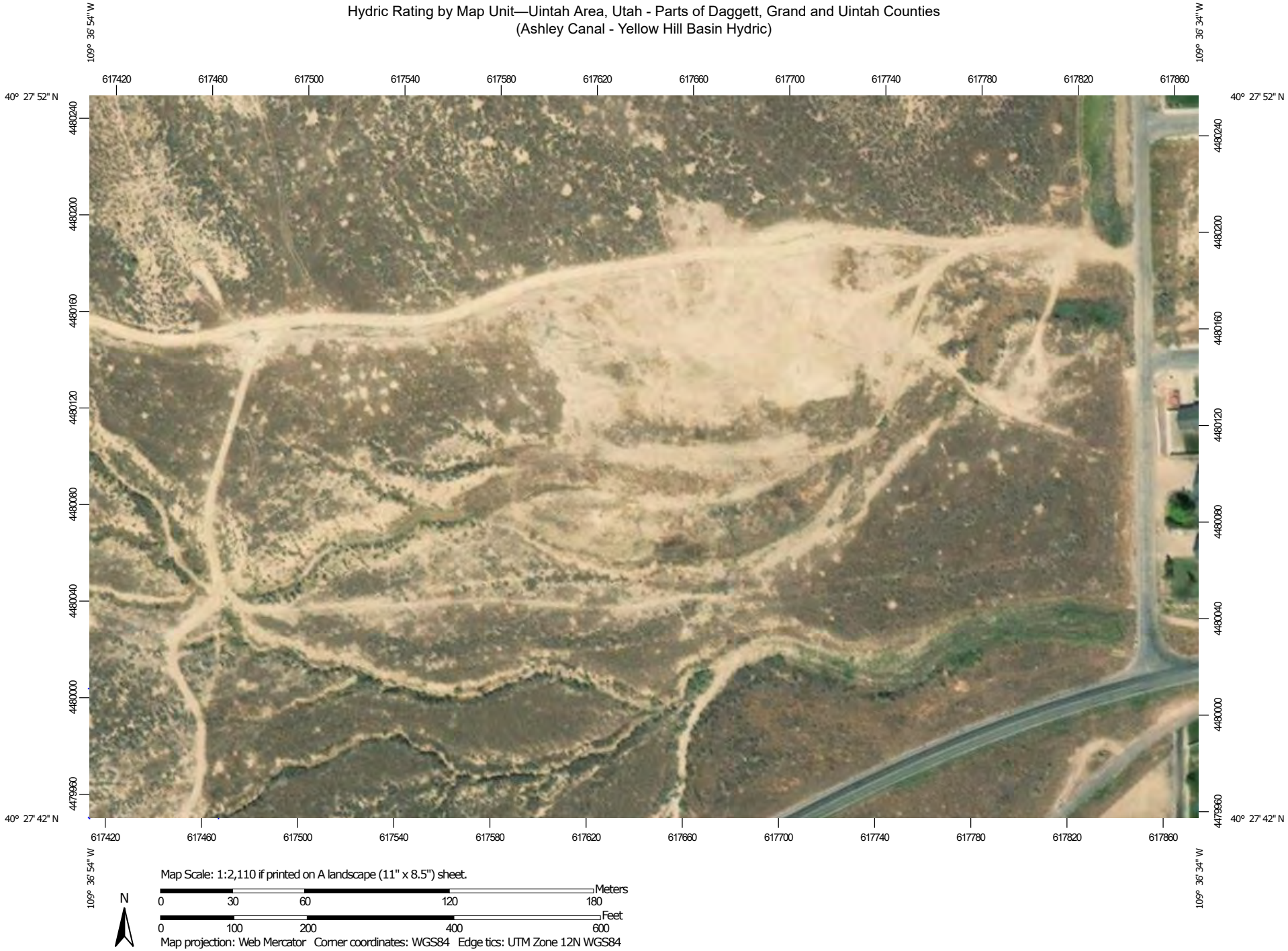
Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Hydric Rating by Map Unit—Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
(Ashley Canal - Yellow Hill Basin Hydric)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
Survey Area Data: Version 13, Sep 11, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2009—Sep 2, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
97	Hanksville silty clay loam, moist, 25 to 50 percent slopes	0	0.6	3.2%
136	Mikim loam, 1 to 3 percent slopes	0	14.9	79.7%
137	Mikim loam, 3 to 15 percent slopes	0	3.2	17.1%
Totals for Area of Interest			**18.7**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Hydric Rating by Map Unit—Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
(Trail Alignment)

Map Scale: 1:12,600 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 150 300 600 900

Feet
0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Uintah Area, Utah - Parts of Daggett, Grand and Uintah Counties
Survey Area Data: Version 14, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2009—Sep 15, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
162	Nolava-Nolava, wet complex, 0 to 2 percent slopes	0	1.1	9.5%
163	Nolava-Nolava, wet complex, 2 to 4 percent slopes	0	0.3	2.1%
206	Shotnick sandy loam, 2 to 4 percent slopes	0	0.5	4.3%
243	Turzo-Umbo complex, 0 to 2 percent slopes	4	3.0	25.1%
244	Turzo-Umbo complex, 2 to 4 percent slopes	0	0.5	4.1%
251	Umbo clay loam, 0 to 2 percent slopes	8	5.9	49.3%
275	Wyasket loam, 0 to 2 percent slopes	85	0.7	5.6%
Totals for Area of Interest			**11.9**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

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If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

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Rating Options

Aggregation Method: Percent Present

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Percent Present" returns the cumulative percent composition of all components of a map unit for which a certain condition is true. For example, attribute "Hydric Rating by Map Unit" returns the cumulative percent composition of all components of a map unit where the corresponding hydric rating is "Yes". Conditions may be simple or complex. At runtime, the user may be able to specify all, some or none of the conditions in question.

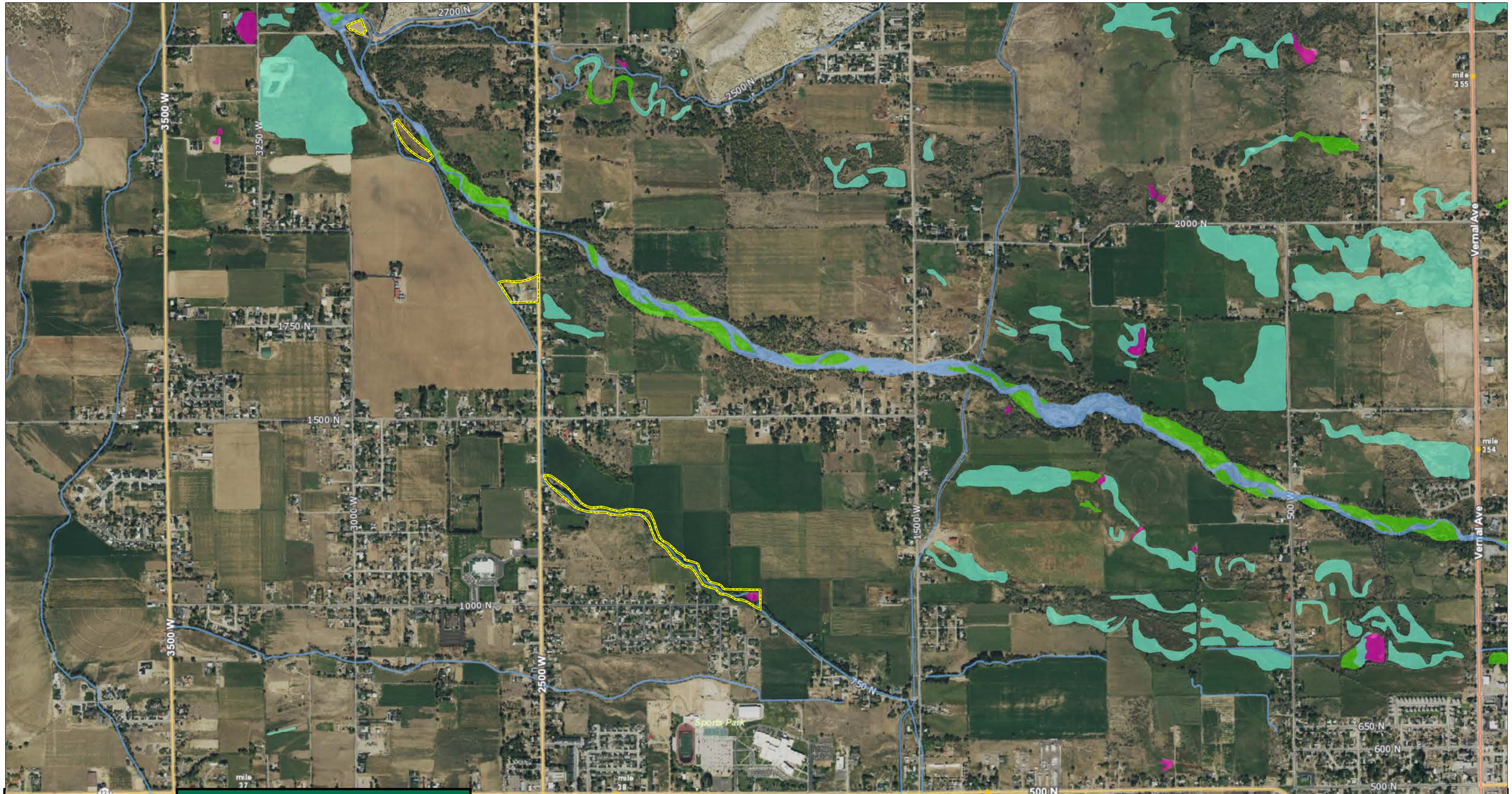
Component Percent Cutoff: None Specified

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

Appendix F – NWI Maps



J·U·B ENGINEERS, INC.

NWI Map 1

Ashley Valley Watershed Flood & Irrigation Project

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

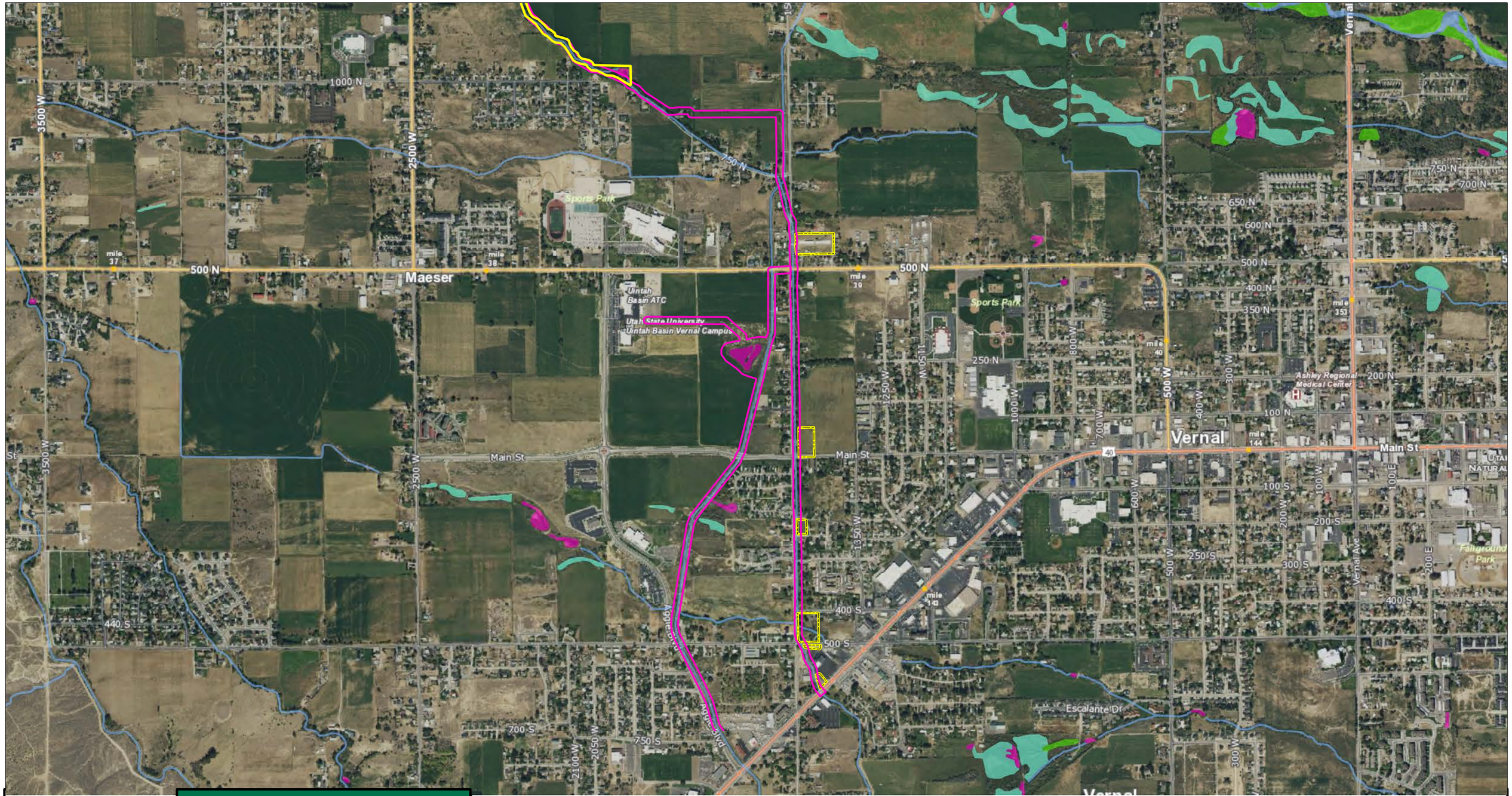
N

0 800 1,600 3,200 Feet

Legend

- Staging Areas (47 AC)
- Ephemeral Channel (8,204 LF)
- Project Boundary (104.65 AC)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

E-373



NWI Map 2

Ashley Valley Watershed Flood & Irrigation Project

J·U·B ENGINEERS, INC.

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

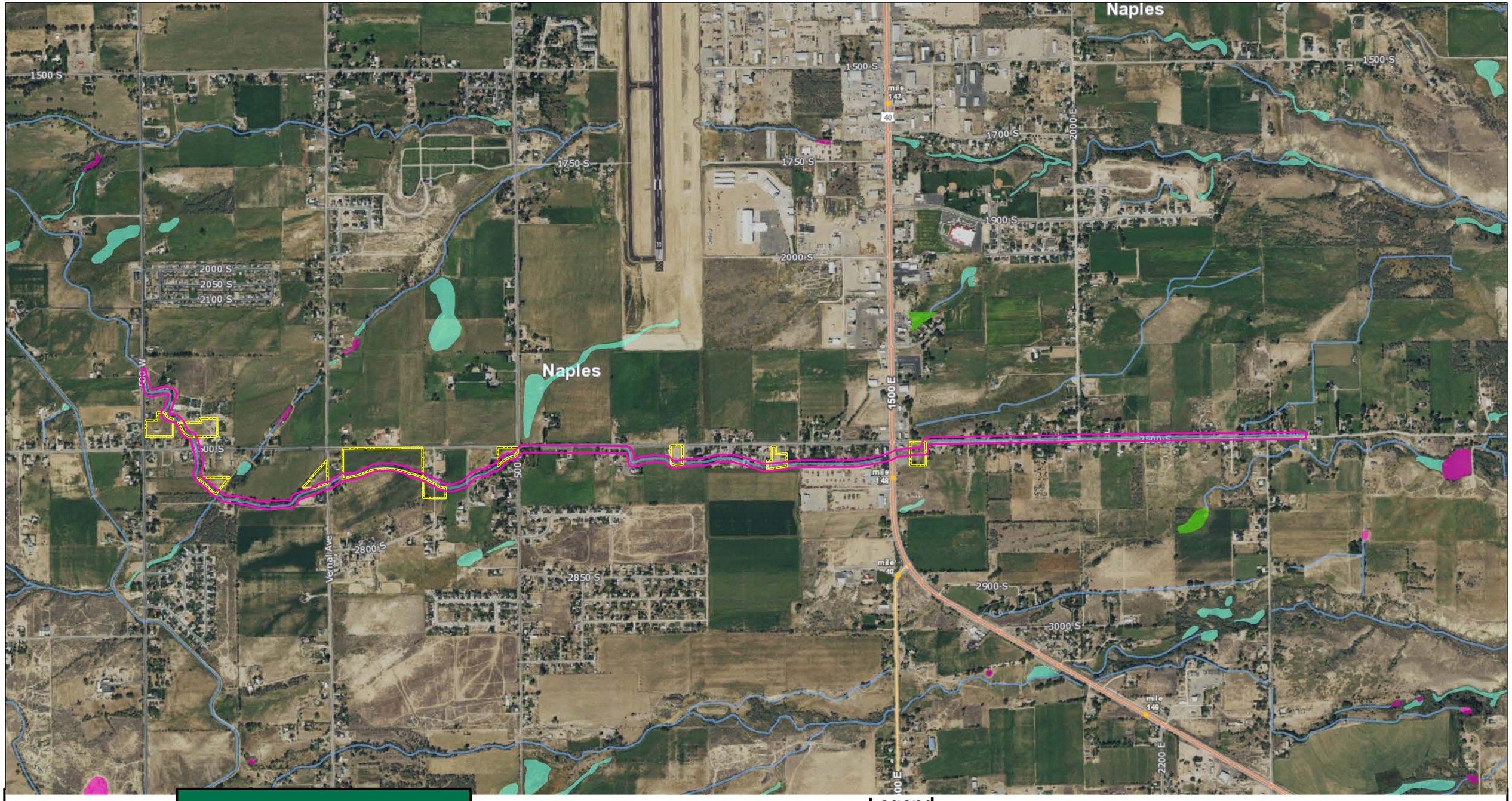
N

0 800 1,600 3,200 Feet

Legend

- Staging Areas (47 AC)
- Ephemeral Channel (8,204 LF)
- Project Boundary (104.65 AC)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

E-374



J·U·B ENGINEERS, INC.

NWI Map 3

Ashley Valley Watershed Flood & Irrigation Project

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

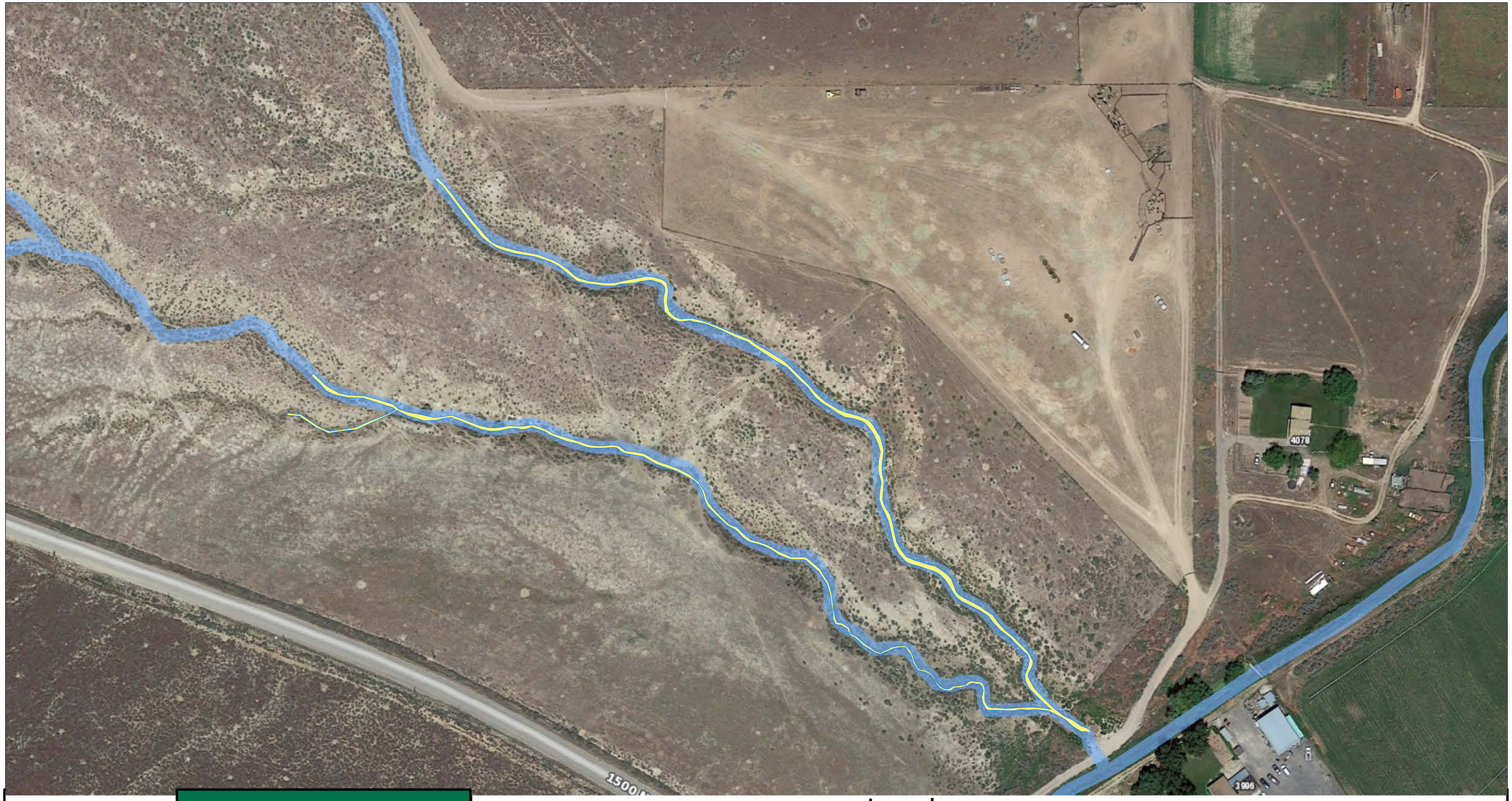
N

0 800 1,600 3,200 Feet

Legend

- Staging Areas (47 AC)
- Ephemeral Channel (8,204 LF)
- Project Boundary (104.65 AC)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

E-375



J·U·B ENGINEERS, INC.

NWI Map 4

Ashley Valley Watershed Flood & Irrigation Project

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

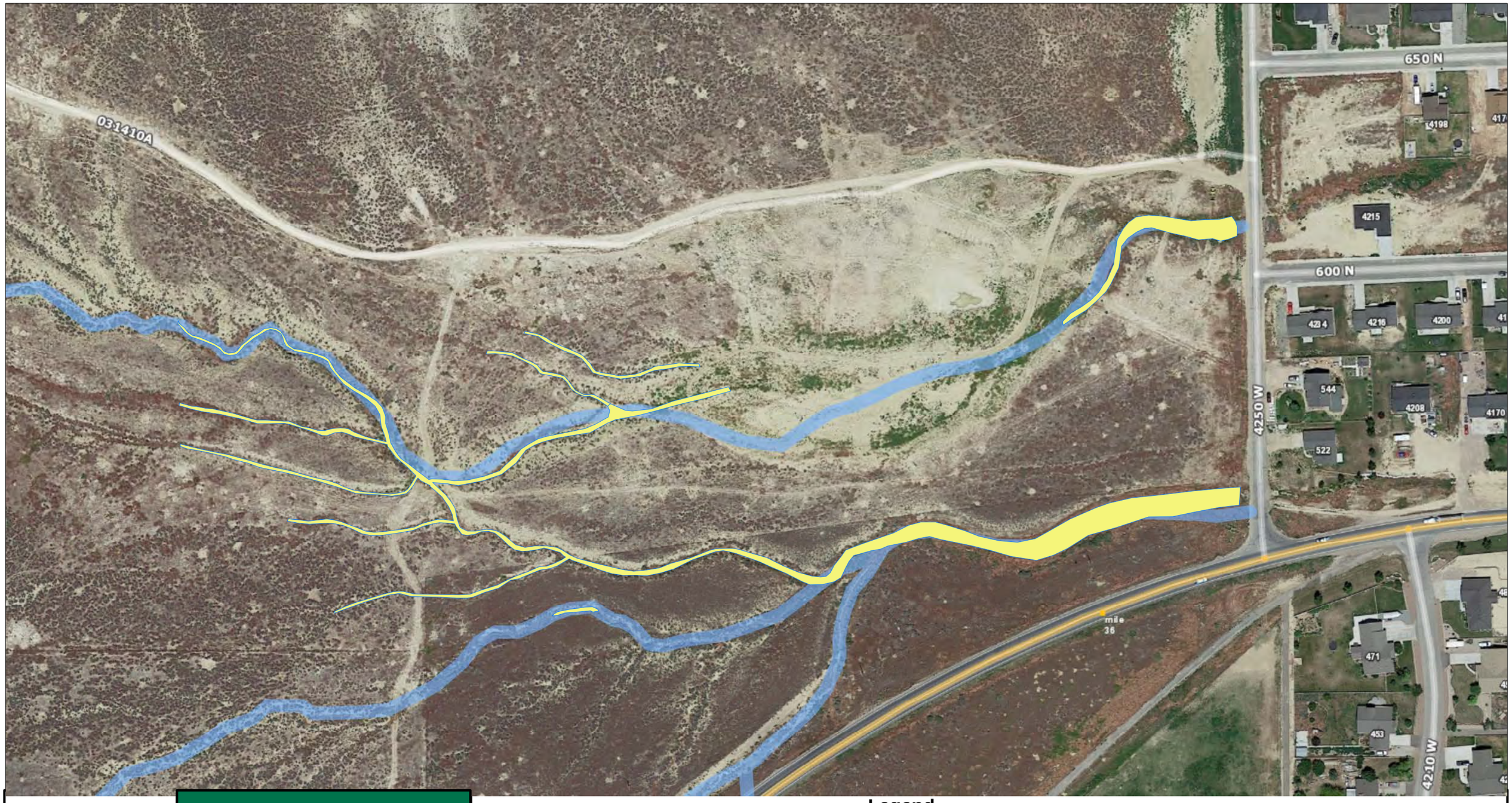
N

0 90 180 360 Feet

Legend

- Staging Areas (47 AC)
- Ephemeral Channel (8,204 LF)
- Project Boundary (104.65 AC)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

E-376



NWI Map 5

Ashley Valley Watershed Flood & Irrigation Project

J·U·B ENGINEERS, INC.

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

N

0 90 180 360 Feet

Legend

- Staging Areas (47 AC)
- Ephemeral Channel (8,204 LF)
- Project Boundary (104.65 AC)
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Riverine

E-377

Biological Assessment of the

Ashley Valley Watershed Flood & Irrigation Project

Uintah County, Utah

Concur not likely to adversely affect
Species: Ute ladies'-tresses

Critical Habitat: none

YVETTE CONVERSE
Digitally signed by YVETTE CONVERSE
Date: 2021.05.19 17:38:36 -06'00'

U.S. Fish and Wildlife Utah Field Supervisor
TAILS #: 06E23000-2021-I-0496

RECEIVED: May 14, 2021

Prepared for

Natural Resources Conservation Service

Prepared by

J-U-B ENGINEERS, Inc.
392 E. Winchester St., Suite 300
Salt Lake City, UT 84107

April 2021

Table of Contents

Appendices

1 Introduction

This biological assessment (BA) was prepared for the proposed Ashley Valley Watershed Flood & Irrigation Project (Proposed Action) located in Uintah County, Utah. This BA was prepared on behalf of the Uintah County and Ashley Central Irrigation Company (ACIC) for the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). Uintah County and ACIC secured funding for the Proposed Action through the Watershed Protection and Flood Prevention Act [Public Law (PL) 83-566]. This BA was prepared in compliance with Section 7(a)(2) of the Endangered Species Act (ESA) (16 U.S.C. 1536(c)) to sufficiently document and review the Proposed Action's Action Area (Action Area) to assess the degree to which the Proposed Action may affect: federally threatened or endangered species, or species proposed for listing; designated and proposed critical habitat. This BA serves as supporting documentation for the Watershed Plan-Environmental Assessment for the Proposed Action, and as supporting rationale for effect determinations for ESA consultation purposes.

Project Area & Action Area

The Proposed Action is located in the Ashley Valley within the Lower Green-Diamond Sub-Basin (HUC 14060010) within the Lower Green Basin (Watershed Map & Preferred Alternative Map, Appendix 1). The Proposed Action occurs within the cities of Vernal and Naples, and portions of unincorporated Uintah County. The Proposed Action is contained within Sections 7, 8, 16, 18, 21, 22, 27, 28, 34, and 35, Township 4 South, Range 21 East; Sections 1 and 2, Township 5 South, Range 21 East; and, Sections 5 and 6, Township 5 South, Range 22 East Salt Lake Base and Meridian.

The Project Area would encompass two detention basin sites in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City and would encompass 9.6 miles of the Ashley Central Canal and would construct 3 miles of pedestrian and recreation trails. The Action Area for the Proposed Action encompasses the two detention basins and the 9.6 miles of the Ashley Central Canal with a 300-foot buffer around the canal to meet the protocol guidelines set forth by U.S. Fish & Wildlife Service (USFWS 2021) for Ute Ladies'-tresses surveys.

Proposed Action

The Proposed Action would encompass several locations in its Action Area and would involve multiple actions. The Proposed Action would construct two large detention basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City. Additionally, the Proposed Action would pipe and pressurize approximately 9.6 miles of the Ashley Central Canal with 14-inch to 48-inch High-Density Polyethylene (HDPE) pipe and fittings. The northern portion of the alignment is currently piped and deteriorating; therefore, this segment would be replaced with HDPE pipe and a portion would be slipped where it is currently piped under Ashley Creek.

The Proposed Action would also replace 38 turnout meters, install two screening structures, and construct a new inlet control structure at the McNaughten tie-in to turnout #13. The canal would be regraded and would then function as a floodwater conveyance facility (including piping the lower 1,500 feet).

Additional elements of the Proposed Action would include the installation of approximately 3 miles of pedestrian and recreation trails, which would provide biking and walking access to educational, recreational, and commercial facilities (Preferred Alternative Map, Appendix 1). Backhoes, excavators, haul trucks, and other smaller construction vehicles and equipment would be used to complete the Proposed Action. The Proposed Action would not result in additional depletions to the Green River, nor

would there be any additional water rights secured. Construction is projected to begin in fall 2021 and is estimated to complete by summer 2024, with construction activities taking place outside of the irrigation season.

2 Conservation Measures

Construction Best Management Practices (BMPs) are standard requirements and would be required during the implementation of the Proposed Action. These would include, but are not limited to, soil and erosion control devices, noxious weed prevention and control, construction timing to minimize or avoid breeding and nesting season for migratory birds, as well as Standard Operating Procedures required by NRCS. The following BMPs and conservation measures are intended to minimize adverse effects on listed species and their habitats, as well as to protect water quality and minimize disturbance to soils and vegetation.

1. Construction would be timed to occur outside of the irrigation season.
2. Equipment would be pressure washed to avoid noxious weed dispersal within the Action Area.
3. Native seed mixes appropriate to the surrounding habitat would be utilized to re-establish vegetation in all areas with ground disturbance.
4. All necessary BMPs would be in place to control sediment and erosion, and to protect water quality during construction activities. Piping the canal would occur outside of the irrigation season when water is not present in the canal. BMPs would be in place to protect Ashley Creek from any sediment transport associated with excavation and replacement of the existing pipe segment.
5. A spill prevention control and countermeasure (SPCC) plan would be in place prior to any construction activities. Construction equipment would be fueled offsite at a commercial facility. A stormwater pollution prevention plan (SWPPP) would be in place prior to any construction activities.
6. All construction activities and staging areas shall be confined within the established Action Area.
7. The site shall be cleared for any migratory bird and bird nests prior to removing any large trees.
8. Locations with documented Ute ladies'-tresses outside of the Action Area, but adjacent to the work area, would be protected during construction to avoid any inadvertent disturbance to the plants and adjacent banks of Ashley Creek. The Proposed Action would not disturb documented Ute ladies'-tresses plants and would not disturb the Ashley Creek channel.
9. A pre-construction survey for Ute ladies'-tresses will be conducted prior to work commencement.
10. If three years of survey cannot be completed prior to construction, then an additional year of survey will be completed post construction during the flowering period.
11. No herbicide use will be allowed by the contractor in the project alignment, and specifically no herbicide will be allowed in the northern segment of the project alignment where suitable habitat for ULTs exists.
12. For dust abatement, the contractor shall only use water within the project area. No chemicals will be allowed.

3 Methodology

Official Species Lists from the U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) system was updated for the Action Area on January 15, 2021 (Appendix 2). The Utah Division of Wildlife Resources' (UDWR) Utah Natural Heritage Database was also consulted to determine

records of occurrence for ESA-listed and State Sensitive Species in the Proposed Action's vicinity (Appendix 3). A field survey to assess impacts for all ESA-listed species identified by the IPaC, and a protocol level survey for Ute Ladies'-tresses and an evaluation of suitable habitat was conducted by environmental specialists with J-U-B ENGINEERS, Inc. on August 27 and 28, 2019 to assess existing environmental conditions in the Action Area. Three years of survey in coordination with the U.S. Bureau of Reclamation (USBR) was completed for the central portion of the alignment (approximately 2.5 miles) as this portion of the project was previously slated for USBR Salinity Control funding. No suitable habitat was identified in that area (see Appendix 5). If necessary, additional protocol level surveys for Ute Ladies'-tresses in portions of the Action Area with potentially suitable habitat will be completed in September 2021 and a pre-construction survey for the species will be conducted prior to work commencement. Species identified by the IPaC with potential to occur within the Action Area did not change between the field visit and the IPaC update.

4 Existing Environmental Conditions

The portions of the Ashley Central Canal involved in this Proposed Action range in elevation from approximately 5,175 feet above mean sea level (AMSL) and 5,610 feet AMSL. The proposed locations for both detention basins are at approximately 5,740 feet AMSL. Land use in the Action Area consists of agricultural, residential, and undeveloped land uses. The Ashley Central Canal and Steinaker Service Canal are unlined open canals that flow along agricultural, residential and undeveloped properties, as well as along the city roads. The upper, northwestern segment of the Ashley Central Canal is already piped and Ashley Creek flows adjacent to the Ashley pipe alignment (the channel is within 75 feet of the pipe alignment) for approximately 0.16 miles from the diversion to the end of the piped segment. Once the piped segment opens into the canal, Ashley Creek flows away from the canal to the south along the east side of the valley before discharging to the Green River at the valley's southeast end. The Ashley Central Canal conveys irrigation water to 38 turnouts along its length as it flows south and west through the valley. Additional inputs to the canal occur at two locations from the Steinaker Reservoir via the Steinaker Canal, as well as any runoff that enters the canal via surface flow. For representative photos of the Action Area, refer to the Photo Inventory (Appendix 4).

The Proposed Action would be constructed within the existing Ashley Central Canal alignment. Vegetation along the Ashley Central Canal was primarily dominated by reed canarygrass (*Phalaris arundinacea*) and a combination of large trees, saplings, and shrubs.

The Steinaker Service Canal flows through agricultural fields and along city roads. Vegetation along the Steinaker Service Canal was similar to the Ashley Central Canal, though large woody vegetation was not observed (see Table 1). Reed canarygrass, Canada thistle (*Cirsium arvense*), and smooth brome (*Bromus inermis*) were the primary species observed. The Ashley Central Canal and Steinaker Service Canal alignments share eight common, dominant species, including:

- Reed canarygrass
- Sunflower (*Helianthus* sp.)
- Scouring rush (*Equisetum hyemale*)
- Smooth brome (*Bromus inermis*)
- Prickly lettuce (*Lactuca serriola*)
- Perennial ryegrass (*Lolium perenne*)
- Showy milkweed (*Asclepias speciose*)
- Curlycup gumweed (*Grindelia squarrosa*)

The proposed location of the Coal Mine and Yellow Hills detention basins are on the northwest side of the Ashley Valley, approximately 4.3 miles west of Vernal in the foothills below Little Mountain. The detention basins would be situated in undeveloped areas that are dominated by a desert-scrub landscape consisting of big sagebrush (*Artemisia tridentata*), cheatgrass (*Bromus tectorum*), and greasewood (*Sarcobatus vermiculatus*).

All Proposed Action staging areas would be located in an upland landscape position and generally within a disturbed setting (i.e., residential property, agricultural fields, paved or gravel parking lots). Staging areas were dominated by weedy, upland and agricultural species, and ornamental grasses (see Table 1).

A variety of soils are found throughout the Action Area. Soils in the Action Area are predominantly loamy in texture. The dominant soil types in the Action Area are primarily Crib loam; Nolava-Nolava, wet complex; and Turzo-Umbo complex (USDA 2019).

It is anticipated that numerous trees would be removed during the construction phase of the Proposed Action, particularly in the northern segment of the alignment, to facilitate access to the canal alignment for pipe installation. Small minnows were observed in deeper pools within the upper segment of the Ashley Central Canal. No fish were observed in the Steinaker Service Canal and conditions were dominated by thick algal blooms, which would not be anticipated to provide suitable fish habitat. The Proposed Action is projected to conserve approximately 4,400 acre-feet of water per year, which would be anticipated to improve fish habitat downstream of the Proposed Action by facilitating increased downstream flows in the early season and by increasing storage water that could supplement downstream flows later in the year.

The climate within the Proposed Action is considered arid, with little annual precipitation. In 2018, Vernal City received approximately 5.5 inches of precipitation, most of which fell as snow. The average temperature is 47.2^{o}F, with average highs reaching 90.9^{o}F in the summer and average lows falling to 8.3^{o}F in the winter months. The Vernal Municipal Airport, Utah weather station typically receives 17.5 inches of snowfall annually (FIPS 49047; NOAA Regional Climate Centers 2019).

5 Status of Species and Habitat

Agency Coordination and Species of Concern

Seven ESA-listed species were identified by the IPaC Report (Dated: January 15, 2021) as potentially occurring in the Action Area (Appendix 2). Table 1 summarizes the ESA-listed species.

Table 1. Federally-Listed Species with the Potential to Occur in the Action Area

Common Name	Scientific Name	ESA Status	Critical Habitat in the Action Area?
Bonytail Chub	*Gila elegans*	Endangered	No
Colorado Pikeminnow	*Ptychocheilus lucius*	Endangered	No
Humpback Chub	*Gila cypha*	Endangered	No
Razorback Sucker	*Xyrauchen texanus*	Endangered	No
Mexican Spotted Owl	*Strix occidentalis*	Threatened	No
Yellow-Billed Cuckoo	*Coccyzus americanus*	Threatened	No
Ute Ladies'-Tresses	*Spiranthes diluvialis*	Threatened	No

No proposed or designated critical habitat occurs in the Action Area. According to the Utah Natural Heritage Database, there are historic records of Ute ladies'-tresses in 2002 within a ½-mile radius of the Action Area. The Utah Natural Heritage Database identified recent records of Ute ladies'-tresses in 2020 within a 2-mile radius of the Action Area (Utah Natural Heritage Database Report, Appendix 3).

Species Descriptions

The following sections briefly discuss bonytail chub, Colorado pikeminnow, humpback chub, razorback sucker, Mexican spotted owl, yellow-billed cuckoo, and greater sage-grouse, which are not anticipated to find suitable habitat within the Action Area. A slightly more detailed analysis is provided for Ute ladies'-tresses because of suitable habitat identified within the Action Area.

Bonytail Chub

In 1980, the USFWS listed the bonytail chub (*Gila elegans*) as an endangered species under the ESA. Bonytail chub is a minnow that is native to the Colorado River system. The near extinction of the bonytail chub can be linked back to flow regulation or alteration, habitat loss, and competition and predation by exotic fishes. Bonytail chub are opportunistic feeders; their prey includes insects, zooplankton, algae, and higher plant matter. Bonytail chub spawn in spring and summer over gravel substrate. Currently, many bonytail chub are raised in fish hatcheries and released into the wild when they are large enough to survive in their natural environment. Bonytail chub prefer stream habitat that consists of eddies, pools, and backwaters near swift currents in large rivers (UDWR 2021).

Colorado Pikeminnow

The Colorado pikeminnow (*Ptychocheilus lucius*) is native to the Colorado River system of the western United States and Mexico. The Colorado pikeminnow was added to the list of endangered species in 1967. Their current range is limited to the upper Colorado River system. The near extinction of the Colorado pikeminnow can be linked to flow regulation or alterations (e.g., the installation of dams), habitat loss, and competition and predation by non-native fishes. Colorado pikeminnows are mainly piscivorous; younger pikeminnows also eat insects and other invertebrates. They spawn in the summer over gravel or smaller cobble substrate situated in riffle habitat. Adult Colorado pikeminnows prefer medium to large rivers and the juveniles prefer slow-moving backwaters. Historical accounts of six-foot long Colorado pikeminnows make this species the largest minnow in North America (UDWR 2021).

Humpback Chub

The humpback chub (*Gila cypha*) is a minnow that is native to the upper Colorado River system including the Green, Yampa, White, and Little Colorado Rivers (USFWS 2014). The USFWS listed the humpback chub as endangered under the ESA in 1967 (USFWS 1990). The humpback chub originally thrived in the fast, deep, white-water areas of the Colorado River and its major tributaries. Human-induced flow alteration, like dams and irrigation diversions, have eliminated habitat and migration routes for the species. Documented occurrences of the humpback chub in Utah are now confined to a few whitewater areas in the Colorado, Green, and White Rivers. The species spawn during the spring and summer in shallow, backwater areas with cobble substrate. Younger chub reside in shallower, turbid habitats until they are large enough to move into whitewater areas (UDWR 2021).

Razorback Sucker

The razorback sucker (*Xyrauchen texanus*) is a federally-listed endangered sucker fish that is native to the Colorado River system. Recent reports of this species have only come from the lower Colorado, lower

Yampa, and Green Rivers (USFWS 2014a). The near extinction of the razorback sucker can be linked to flow regulation or alterations (e.g., the installation of dams and irrigation diversions), habitat loss, and competition and predation by non-native fishes. They spawn between February and June. Adult razorback suckers prefer slow backwater habitats (UDWR 2021).

Mexican Spotted Owl

The Mexican spotted owl (MSO; *Strix occidentalis*) is a federally-listed, threatened species that occurs in in Utah, Colorado, Arizona, New Mexico, and Texas (Federal Register 2013). In Utah, this species is a rare permanent resident. These owls are nocturnal and non-migratory. The MSO occupies steep rocky canyons. These owls tend to be opportunistic feeders that prey on small mammals (e.g., rabbits), birds, reptiles, and insects. MSO individuals utilize suitable, naturally occurring sites and nests sometimes built by other animals. In Utah, their nests are most often located in canyon cliffs (UDWR 2021).

Yellow-Billed Cuckoo

The yellow-billed cuckoo (YBCU; *Coccyzus americanus*) is a federally-listed threatened species under the ESA. The western YBCU is a federally threatened distinct population segment (DPS) of the species that is known or believed to occur in 13 states, including Utah.

As the name suggests, this avian species has a yellow lower mandible. It has rufous wings that contrast against the gray-brown wing coverts and upperparts. The underparts are white, and they have large white spots on a long black undertail (Alsop 2001). It is a neotropical migrant, which winters in South America. Breeding often coincides with the appearance of massive numbers of cicadas, caterpillars, or other large insects (Ehrlich et al. 1992). Its incubation/nestling period is the shortest of any known bird, because it is one of the last neotropical migrants to arrive in North America and the chicks have very little rearing time before embarking on their transcontinental migration. Cuckoos typically start their southerly migration by late August or early September (Parrish et al. 1999). Yellow-billed cuckoos are considered a riparian obligate and are usually found in large tracts of cottonwood/willow habitats with dense sub-canopies (below 33 feet) (UDWR 2021). Suitable breeding and nesting habitat for the species must be at least 300-feet-wide and a minimum of 12 contiguous acres.

In 2014, the USFWS proposed the designation of 546,335 acres of critical habitat for the western YBCU in Arizona, California, Colorado, Idaho, Nevada, New Mexico, Texas, Utah and Wyoming (Federal Register 2014). A portion of the proposed critical habitat for the species is located approximately 8 miles south of the city limits of Vernal, along the Green River. The IPaC Reports did not identify any proposed or designated final critical habitat for the species in the Action Area.

Ute Ladies'-Tresses

Ute ladies'-tresses (ULT; *Spiranthes diluvialis*) was designated as threatened by the USFWS under the ESA in January 1992 (USFWS 1995). Major threats to the species include habitat disruption, urbanization, and stream channelization for agricultural development (UDWR 2021). On May 10, 1995, the USFWS received a petition to delist the species. In October 2004, the USFWS' 90-day findings on the petition found that there is substantial information to delist the species. The USFWS initiated a 12-month status review concurrently with the 5-year review of a listed species under section 4(c)(2)(A) of the ESA. The 12-month findings have not been issued as of the date of this report.

ULT is a member of the orchid family. This perennial herb has small white or ivory flowers that spiral around the 3-15 cm tall spike (USFWS 2019). Populations of the ULT have been found in Utah, Colorado,

Wyoming, Montana, Nevada, Idaho, and Washington (Fertig et al. 2005). The survey time for the species, as identified by the USFWS, is mid-August through mid-September (USFWS 1995). It is found in wetlands and riparian areas, including spring habitats, mesic meadows, river meanders and floodplains. They require open habitats, and populations decline if dense trees and shrubs invade the habitat. The elevation ranges in which populations have been found vary from 750 to 7,000 feet, with most populations existing above 4,000 feet. They are not tolerant of permanent standing water, and do not compete well with aggressive species, such as reed canarygrass.

Due to the general geographic location of the Proposed Action and the recent records of occurrence near the Action Area, a protocol-level ULT survey was conducted to evaluate habitat suitability for the species within the Action Area (Appendix 5). The closest known reference populations identified by USFWS are located near Maeser, Utah and near Vernal, Utah, approximately 1 mile to the northeast of the Action Area. A protocol-level ULT survey was conducted by Autumn Foushee, a qualified biologist, on August 27 and 28, 2019 to determine if the Proposed Action would affect the species or any suitable habitat. Surveys of the central portion of the canal were also conducted during the flowering period in 2017 and 2018 (Appendix 5). The protocol followed for the surveys is detailed in the *USFWS Utah Field Office Guidelines for Conducting and Reporting Botanical Inventories and Monitoring of Federally Listed, Proposed and Candidate Plants* (2011) and the *USFWS Interim Survey Requirements for Ute Ladies'-tresses Orchid* (1992). Two ULT individuals were located at the reference population site of Brush Creek. Other species observed in the reference population survey area were white sweet clover (*Melilotus albus*) and goldenrod (*Solidago spectabilis*).

6 Effects of the Action

Bonytail Chub

The characteristics of Ashley Central Canal and the Steinaker Canal are not conducive to bonytail habitat requirements. While the Ashley Central Canal contains some areas with deeper pools, the canal is relatively narrow with a slow current, and a consistently sandy-mud substrate with intermittent cobbles, and a controlled water regime with a long period of no flow during the fall, winter and early spring of each year. The Steinaker Service Canal is also slow-moving, with no eddies, pools, or backwaters near swift currents. The substrate was not visible as the canal within the Action Area contained thick green algae growth and grass cuttings, which are indicators of unsuitable habitat as well. Additionally, the proposed detention basin sites do not contain hydrologic features that would provide bonytail habitat. Lastly, the Proposed Action would not result in additional depletions or additional water rights. Therefore, the Proposed Action is anticipated to have **No Effect** on the bonytail chub.

Colorado Pikeminnow

The substrate, size, and water regime characteristics of Ashley Central Canal and the Steinaker Service Canal are not conducive to Colorado pikeminnow habitat requirements. The canals do not provide suitable spawning habitat (i.e., gravel or cobble substrate in riffles), or habitat for adult or juvenile Colorado pikeminnow (i.e., medium to large river with slow-moving backwater). The sites of the proposed detention basins do not contain hydrologic features that would provide Colorado pikeminnow habitat. Lastly, the Proposed Action would not result in additional depletions or additional water rights. Based on the lack of suitable habitat in the Action Area, it is unlikely that the Colorado pikeminnow would be present in the Action Area. Therefore, the Proposed Action is anticipated to have **No Effect** on the Colorado pikeminnow.

Humpback Chub

Recorded occurrences of humpback chub have been noted in whitewater reaches of the Green River. Ashley Creek and the Ashley Central Canal have connectivity with the Green River outside of the Action Area, however this connectivity is characterized by multiple diversions and irrigation structures, and a controlled water regime with long periods of no flow in the fall, winter and early spring. While the canals are hydraulically connected with the Green River via Ashley Creek, the inlet to the upper canal pipe is screened and conditions in the canal such as, substrate quality, lack of backwater, and lack of whitewater reaches and lack of seasonal flows, would not support suitable habitat for the species. The sites of the proposed detention basins do not contain hydrologic features that would provide humpback chub habitat. Lastly, the Proposed Action would not result in additional depletions or additional water rights. Given the lack of suitable habitat to support the species, it is unlikely that the humpback chub would be present in the Action Area. Therefore, the Proposed Action is anticipated to have **No Effect** on the humpback chub.

Razorback Sucker

The flow of Ashley Central Canal and Steinaker Service Canal is slow, and the substrate is predominantly muddy, which could provide marginally suitable habitat for the razorback sucker during the irrigation season. Given the historic records of occurrence of razorback sucker, Ashley Creek likely provided habitat for the species historically. However, given the upper portion of the Ashley Central Canal is an off-channel diversion that is screened and diverted into a pipe from Ashley Creek, and given the lower segments of the canal seasonally have backwater characteristics in conjunction with irrigation activities but otherwise have a controlled water regime with long periods of no flow in fall, winter and early spring, it is anticipated that Ashley Central Canal would not provide habitat to support the razorback sucker.

The locations of the proposed detention basins do not contain hydrologic features that would provide razorback sucker habitat. Lastly, the Proposed Action would not result in additional depletions or additional water rights. Given the lack of recent records of occurrence and the level of human disturbance, a controlled water regime with periods of no flow, and existing fish barriers, it would be unlikely for razorback sucker to be present within Ashley Central Canal. Therefore, the Proposed Action is anticipated to have **No Effect** on the razorback sucker.

Mexican Spotted Owl

The Action Area is relatively flat and surrounded by foothills with no nearby cliff structure. The Action Area does not contain steep rocky canyons with cliff structure that would provide suitable nesting and foraging habitat for the MSO. Given the lack of suitable habitat, it is unlikely that MSO would be present in the Action Area. Therefore, the Proposed Action is anticipated to have **No Effect** on the Mexican spotted owl.

Yellow-Billed Cuckoo

YBCU require a dense mid-story with a mature overstory of willow/cottonwood that is at least 300 feet wide and comprised of a minimum of 12 contiguous acres. A narrow riparian corridor with willow and cottonwood is present along the Proposed Action alignment. The corridor is less than 100 feet wide along most of the corridor and approximately 150 feet wide at the widest point with agricultural or residential land uses on either side. Therefore, the immediate Action Area would not be considered suitable breeding or nesting habitat for the species. Within a ½-mile of the upper segment of the Action Area, patches of potentially suitable habitat may be present along Ashley Creek north of the Action Area. The riparian corridor within the Action Area could provide marginally suitable stopover habitat for the species during

migration if present in the area, with individuals departing by August or September. While suitable habitat may be present within a ½-mile of the northern terminus of the Action Area, construction would occur outside of the irrigation season (mid-October to early April), therefore construction activities in the Action Area would not overlap the accepted breeding and nesting season for the species. The Proposed Action would likely require the permanent removal of multiple overstory trees along the northern segment of the Action Area, however the narrow string of riparian trees and shrubs would not be considered suitable habitat for the species. The location of the proposed detention basins is characterized by sagebrush steppe and does not contain suitable habitat for YBCU. There is no critical habitat identified for the YBCU within the Action Area. Based on the lack of suitable habitat within the Action Area and with consideration to the timing of the Proposed Action to be outside the accepted YBCU migration, breeding and nesting seasons, the Proposed Action is anticipated to have **No Effect** on the yellow-billed cuckoo.

Ute Ladies'-Tresses

The riparian fringe associated with Ashley Creek, Ashley Central Canal, and Steinaker Service Canal was determined to be the portion of the Action Area with potential to contain suitable habitat for ULT and was surveyed for the presence of the species and to evaluate habitat suitability. The Proposed Action Area included a 300-foot-wide (from the edge of the canal) survey corridor established along the Ashley Central Canal and Steinaker Service Canal. The survey area was approximately 9.6 miles long. Two clusters of ULT plants were observed and documented within the Action Area at the northern segment of the alignment (along Ashley Creek on the opposite bank from the adjacent Ashley Central Canal alignment). One cluster with six individuals and one cluster with three individuals were documented and their status and location reported to the USFWS on August 29, 2019.

Nine ULT individuals were observed within the Action Area, but outside the immediate work area associated with work area of the Proposed Action. No actions associated with the Proposed Action would occur within the area containing ULT individuals. The locations containing the identified ULT plants would be marked off and protected to avoid any potential for accidental disturbance to the area. The Proposed Action alignment is situated on the opposite side of Ashley Creek from where plants were observed, and the Proposed Action would implement no action within Ashley Creek or on the opposite side of the creek. Although the Ashley Creek channel falls within the Action Area at the northern segment, the Proposed Action would remain within the existing canal pipeline alignment and would not disturb the creek channel where the ULT plants were identified.

From the diversion to the excavation point for the pipe to be slipped under Ashley Creek, approximately 700 feet, the existing pipe would be excavated and replaced in the same location. Approximately 100 feet of pipe would be slipped, which is the portion that extends under Ashley Creek. Once the existing canal pipeline diverts from the diversion, it is more than 300 feet from Ashley Creek, which swings to the west away from the pipe, until the creek turns back east and comes to within 75 feet of the existing pipe alignment. It is at this point that the existing pipe goes under Ashley Creek and daylights on the opposite side of the creek into the open, unpiped Ashley Central Canal. The existing pipe crossing under Ashley Creek is heavily armored by riprap on the channel banks and by a concrete grout across the entire channel.

The State of Utah identifies that ground disturbance or construction activities occurring within 30 feet of a natural stream requires a stream alteration permit. As such, this definition will be used to identify the extent of the terminology "stream edge." Approximately 700 feet of excavation to remove the existing pipe will occur outside the stream edge and would have no potential to disturb the stream channel and

would not disturb suitable habitat for ULT given the density of shrub and overstory cover and the level of disturbance associated with the existing pipe alignment (rock overlay and vehicle access). At the excavation point, where the pipe slipping would begin, an area equaling 300 square feet would be excavated in a location that is near the stream edge. Similarly, an exit point for the pipe slip would be excavated on the opposite side of Ashley Creek, which would also equal 300 square feet in area. Therefore, a total of 600 square feet, or 0.013 acres, of ground disturbance would occur within the near stream edge setting (Figure 1). Figure 1 identifies the area of suitable habitat identified during the field survey of the Action Area, which occurs at the northernmost limit of the Project Area (see Preferred Alternative Map, Appendix 1).

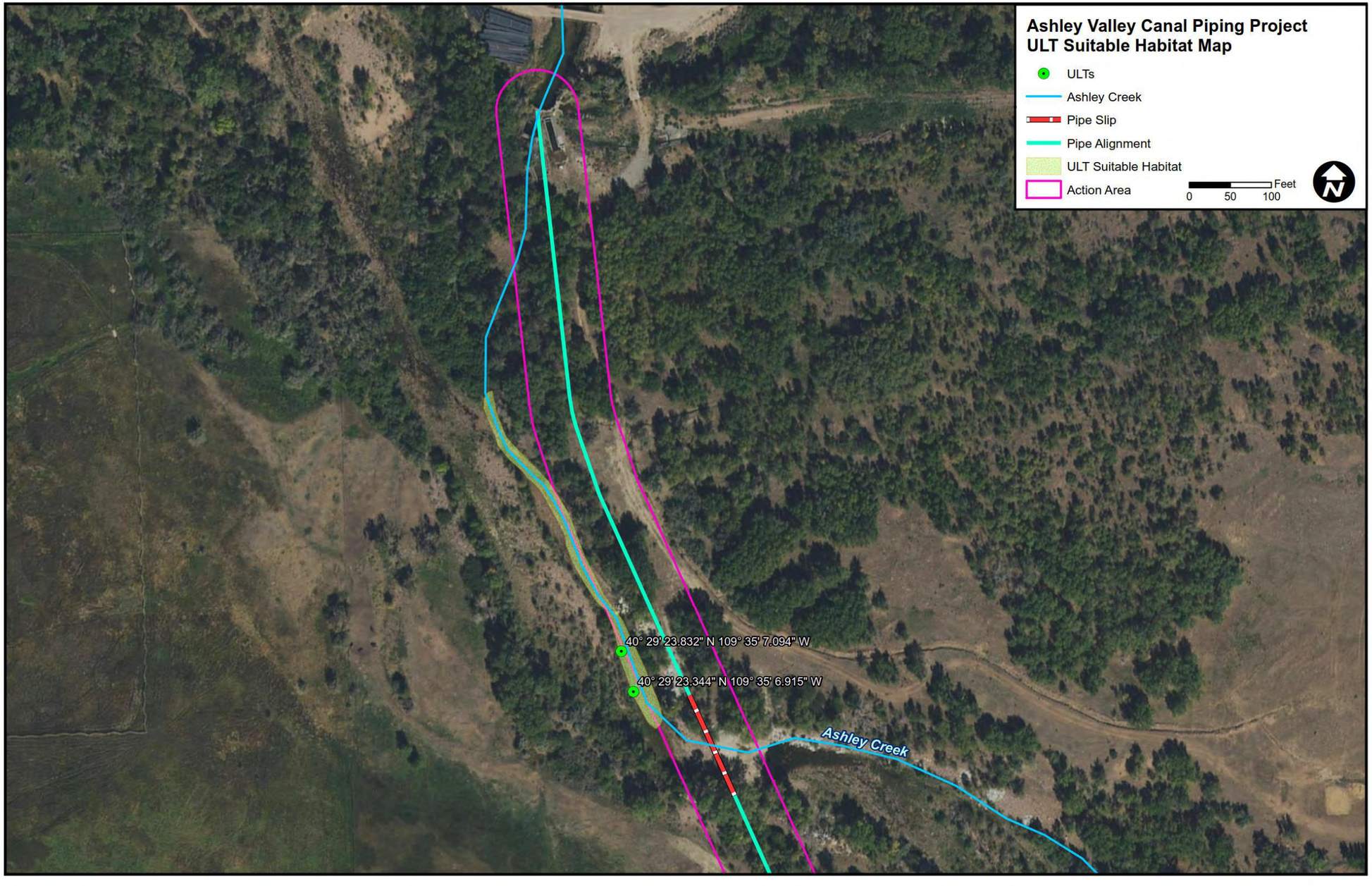


Figure 1. Ashley Valley Canal Piping Project ULT Suitable Habitat Map

The Proposed Action would also remove large overstory trees along portions of the canal alignment, however the removal of trees would occur in areas that do not currently have suitable habitat for ULT given the presence of dense vegetation dominated by reed canarygrass, horsetail, willow and other grasses and shrubs. Therefore, indirect effects to the species related to this action also are not anticipated.

The remaining portions of Ashley Central Canal south of the Ashley Creek crossing did not contain suitable habitat for ULTs within the canal or adjacent to the canal (Appendix 5). Most of the canal length is characterized by a landscape position that is level with the surrounding agriculture fields or below the grade of the surrounding agriculture fields, therefore little seepage comes from the canal embankment into the adjacent fields, but likely enters the groundwater table. Most fields are either fallow and unirrigated, and do not exhibit mesic conditions, or they are irrigated and have active grazing by cattle and horses, such that mesic conditions would persist post piping and would not be changed by the loss of seepage water into the water table. Additionally, the level of disturbance from livestock in these fields would not be conducive to ULT persistence. Lastly, most of the canal is characterized by dense reed canarygrass, which would not be conducive to ULT presence and persistence. No critical habitat identified for the species exists within the Action Area.

According to coordination with the USFWS, any action with ground disturbance within 300 feet of identified ULT individuals may constitute a May Affect Not Likely to Adversely Affect (MANLAA) determination. While the Proposed Action is not anticipated to directly impact ULTs or suitable habitat for the species, the Proposed Action would include ground disturbance within 300 feet of the identified ULTs at the northern portion of the alignment, where the existing pipe would be replaced and the Ashley Creek crossing would be slipped.

Conservation measures would be implemented to avoid disturbance to the plants along Ashley Creek, to the banks of the creek, and to the creek channel and water quality. These measures would include protection of the stream banks and channel using silt fencing around the construction work area to prevent sediment transport from excavation sites to the stream banks and channel. Clear measures would be included in the contractor documents that all work must avoid the Ashley Creek channel, and that access to the pipeline can only be gained from the eastern side of the Ashley alignment, where no suitable habitat exists. Additionally, ULT surveys in locations along the proposed alignment with suitable habitat will be surveyed during the ULT flowering period every year until construction begins, and a pre-construction survey will be conducted in the flowering season prior to the anticipated start of construction. If additional, previously un-documented ULT individuals are identified in these surveys, the NRCS and USFWS would be notified immediately, and a consultation re-initiation may be necessary. The appropriate course of action would be determined in coordination with the USFWS.

Therefore, based on the scope and footprint of the Proposed Action, the proximity of the northern portion of the alignment to known ULT individuals; the lack of suitable habitat along most of the Ashley Central Canal; the minimal ground disturbance at stream edge; and the conservation measures proposed to protect Ashley Creek and known ULT locations, the Proposed Action **May Affect but is Not Likely to Adversely Affect** the Ute ladies'-tresses.

7 Determination of Effects

After considering the available scientific information regarding the biological requirements and the status of ESA-listed species considered in this BA, the environmental baseline for the Action Area, and the

potential effects of the Proposed Action within the Project Area, the following effect determinations for the Colorado River fishes, Mexican spotted owl, yellow-billed cuckoo, and Ute ladies'-tresses were made:

Table 2. Federally-Listed Species Effects Determination Summary

Common Name	Scientific Name	ESA Status	Effect Determination
Bonytail Chub	*Gila elegans*	Endangered	No Effect
Colorado Pikeminnow	*Ptychocheilus lucius*	Endangered	No Effect
Humpback Chub	*Gila cypha*	Endangered	No Effect
Razorback Sucker	*Xyrauchen texanus*	Endangered	No Effect
Mexican Spotted Owl	*Strix occidentalis*	Threatened	No Effect
Yellow-Billed Cuckoo	*Coccyzus americanus*	Threatened	No Effect
Ute Ladies'-Tresses	*Spiranthes diluvialis*	Threatened	May Affect Not Likely to Adversely Affect

It should be noted that the final authority regarding species effect determinations rests with the appropriate regulatory authority.

8 References

Alsop, F.J. 2001. *Birds of North America, Western Region*. DK Publishing, Inc. New York, New York.

Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1992. *Birds in Jeopardy: The Imperiled and Extinct Birds of the United States and Canada, including Hawaii and Puerto Rico*. Stanford University Press, Stanford, California. 259 pp.

Federal Register Volume 78, Number 25. Wednesday February 6, 2013. Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; 5-year Status Review of Ocelot and Mexican Spotted Owl in the Southwest Region.

Federal Register Volume 179, Number 158. Friday August 15, 2014. Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo.

Federal Register Volume 83, Number 124. Wednesday June 27, 2018. Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; 90-day Findings for Three Species.

Federal Register Volume 85, Number 180. Wednesday, September 16, 2020. Department of Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; Findings on a Petition to Delist the Distinct Population Segment of the Western Yellow-Billed Cuckoo and a Petition to List the U.S. Population of Northwestern Moose.

Fertig, W., R. Black, and P. Wolken. 2005. *Rangewide Status Review of Ute Ladies'-tresses (Spiranthes diluvialis)*. Prepared for the U.S. Fish and Wildlife Service & Central Utah Water Conservancy District.

National Oceanic and Atmospheric Administration (NOAA). 2019. "EFH Mapper." NOAA Conservation: National Marine Fisheries Service. https://www.habitat.noaa.gov/protection/efh/efhmapper/. Accessed September 18, 2019.

NOAA Regional Climate Centers. WETS Station: Vernal Municipal AP, UT. http://agacis.rcc-acis.org/?fips=49047. Accessed September 11, 2019.

Parrish, J. R., F. P. Howe, and R. E. Norvell. 1999. *Utah Partners in Flight draft conservation strategy*. UDWR publication number 99-40. Utah Partners in Flight Program, Utah Division of Wildlife Resources, Salt Lake City.

State of Utah Natural Resources – Utah Division of Wildlife Resources (UDWR). Utah Conservation Data Center. Accessed January 15, 2021. http://dwrcdc.nr.utah.gov/ucdc/.

U.S. Census Bureau (Census). "Quick Facts: Vernal City, Utah." https://www.census.gov/quickfacts/vernalcityutah. Accessed September 17, 2019.

U.S. Department of Agriculture (USDA)-Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/. Accessed August 21, 2019.

U.S. Fish and Wildlife Service (USFWS). 2021. https://www.fws.gov/utahfieldoffice/Documents/ULT_Survey_Consultation_Flow_Chart.pdf. Accessed March 10, 2021.

USFWS. 2019. Information for Planning and Consultation (IPaC). Official Species List. Accessed January 15, 2021. https://ecos.fws.gov/ipac/.

USFWS. 2019a. National Wetland Inventory. National Wetland Inventory (NWI). On-line National Wetlands Inventory. http://www.fws.gov/wetlands/Data/mapper.html. Accessed August 21, 2019.

USFWS. "Species Profile for Ute ladies'-tresses (*Spiranthes diluvialis*)." *USFWS Environmental Conservation Online System (ECOS).* https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=2159. Accessed September 17, 2019.

USFWS. 2015. "Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List Greater Sage-Grouse (*Centrocercus urophasianus*) as an Endangered or Threatened Species." Last modified October 2, 2015. https://www.federalregister.gov/documents/2015/10/02/2015-24292/endangered-and-threatened-wildlife-and-plants-12-month-finding-on-a-petition-to-list-greater.

USFWS. 2014. "Humpback Chub (*Gila cypha)* fact sheet." *USFWS Nevada Fish and Wildlife Office*. https://www.fws.gov/nevada/protected_species/fish/species/humpback_chub.html. Accessed September 17, 2019.

USFWS. 2014a. "Razorback Sucker (*Xyrauchen texanus*) fact sheet." *USFWS Nevada Fish and Wildlife Office*. https://www.fws.gov/nevada/protected_species/fish/species/rzbk_sucker.html. Accessed September 17, 2019.

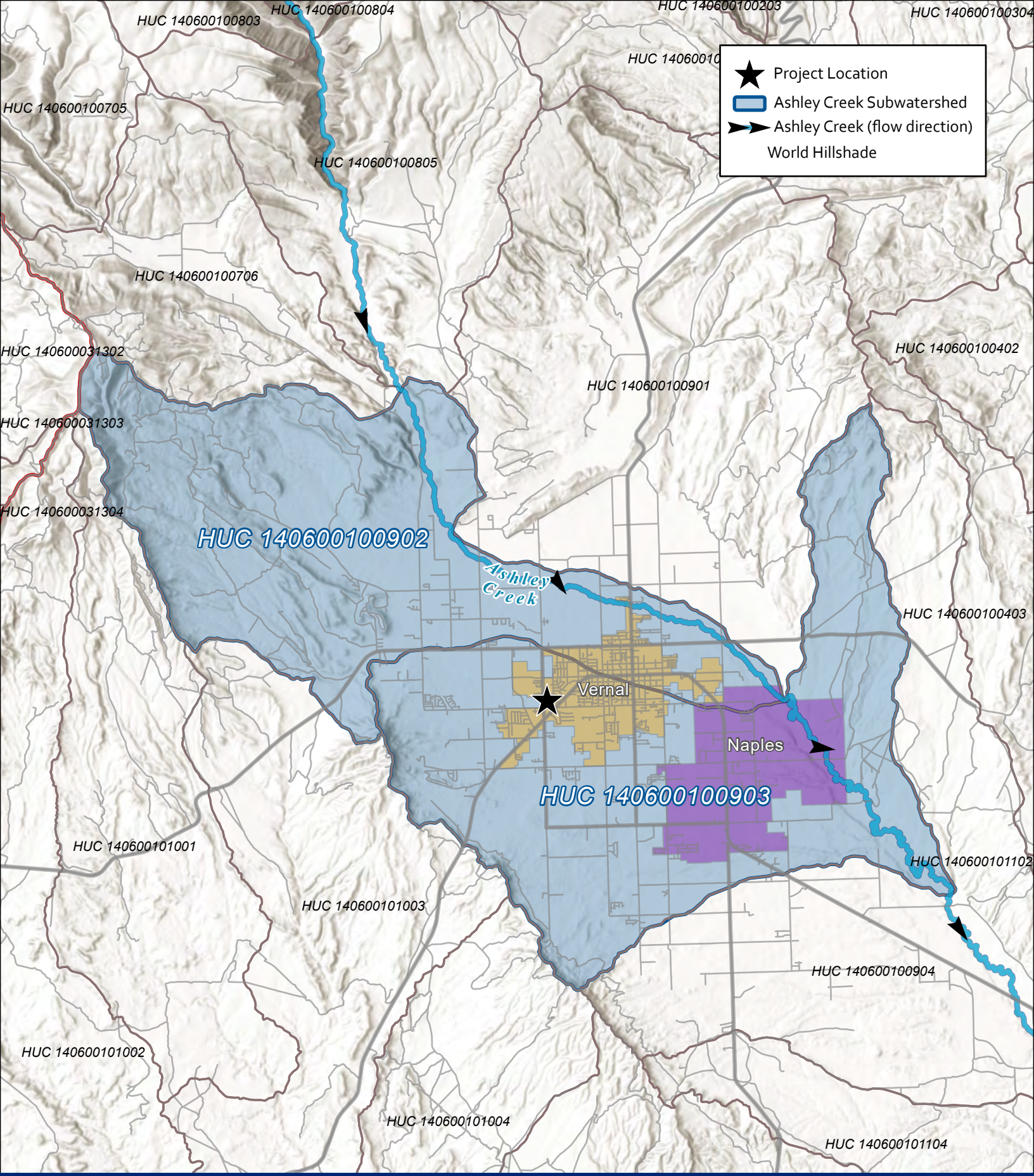
USFWS. 1995. *Ute ladies'-tresses (Spiranthes diluvialis) Draft Recovery Plan*. USFWS, Denver, Colorado.

USFWS. 1990. *Humpback Chub Recovery Plan*. 2nd Revised Recovery Plan. September 19, 1990.

U.S. Geological Survey (SUGS). 2021. Watershed Boundary Dataset. Accessed January 11, 2021. https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=4c08f2e2b13741da96ad4a8f6aa5e36a.

Utah Public Land Policy Coordinating Office (UPLPCO). 2018*. DRAFT Utah Conservation Plan for Greater Sage-Grouse*. State of Utah, Salt Lake City, Utah, USA.

Appendix 1 – Watershed Map & Preferred Alternative Map

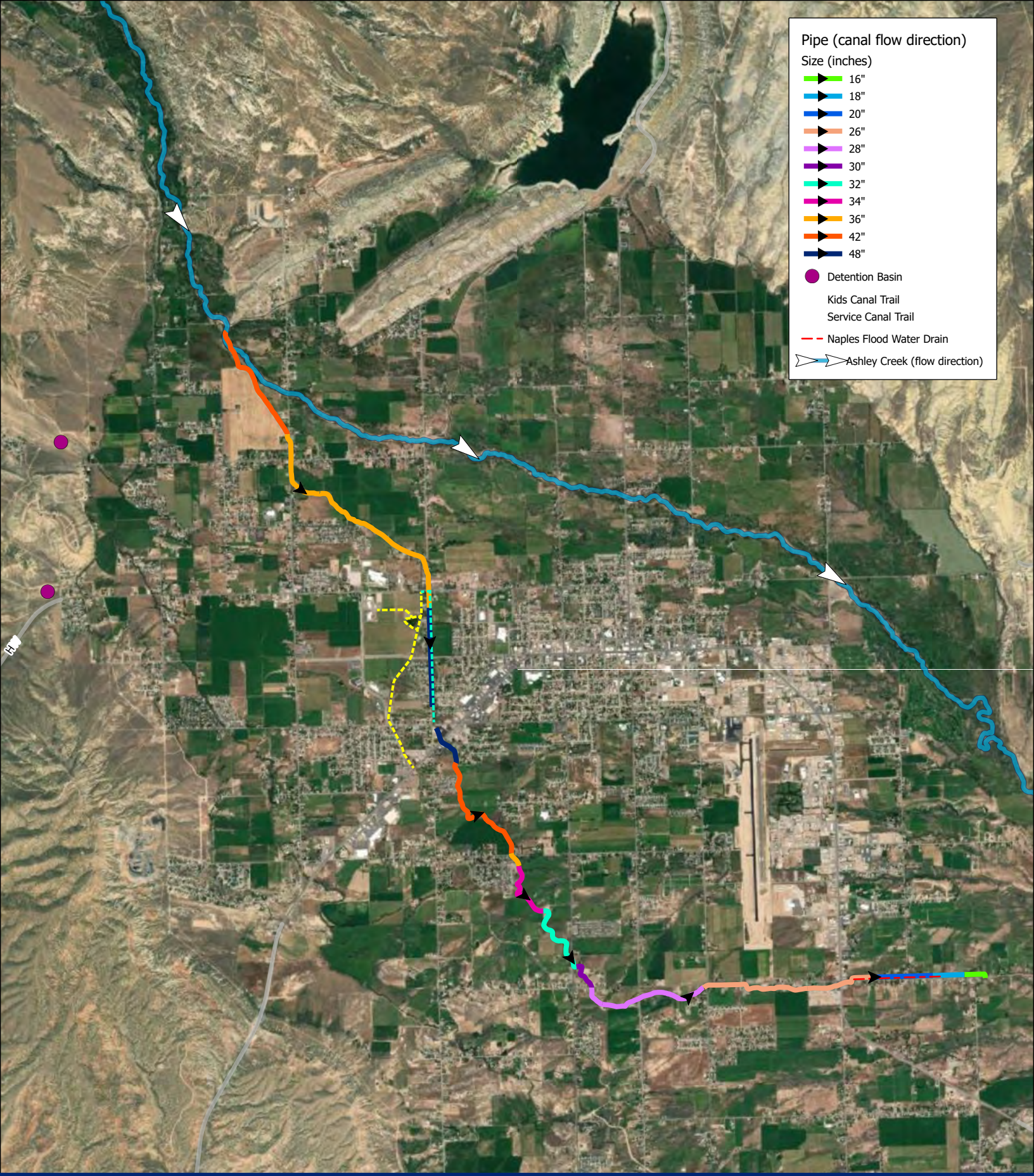


ASHLEY VALLEY WATERSHED

Ashley Valley Watershed Plan EA

0 0.5 1 Miles

N



ASHLEY VALLEY PREFERRED ALTERNATIVE

Ashley Valley Watershed Plan EA

0 0.5 1 Miles

N

Appendix 2 – IPaC Reports

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
Phone: (801) 975-3330 Fax: (801) 975-3331
http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2019-SLI-0567
Event Code: 06E23000-2021-E-00450
Project Name: Ashley Canal - Coal Mine Basin - NRCS Funded

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2019-SLI-0567
Event Code: 06E23000-2021-E-00450
Project Name: Ashley Canal - Coal Mine Basin - NRCS Funded
Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES
Project Description: Coal Mine Basin - The Proposed Project would involve the construction of two large debris basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.4791899414341,-109.60835005316463,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Mexican Spotted Owl *Strix occidentalis lucida*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/8196

Fishes

NAME	STATUS
Bonytail *Gila elegans*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/1377

Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius*	Endangered

Population: Wherever found, except where listed as an experimental population
There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/3531

Humpback Chub *Gila cypha*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/3930

Razorback Sucker *Xyrauchen texanus*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/530

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2159

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
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Phone: (801) 975-3330 Fax: (801) 975-3331
http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2019-SLI-0623
Event Code: 06E23000-2021-E-00448
Project Name: Ashley Central Canal - Middle Piping

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

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A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

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- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2019-SLI-0623
Event Code: 06E23000-2021-E-00448
Project Name: Ashley Central Canal - Middle Piping
Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES
Project Description: The Proposed Project would construct two large debris basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City. Additionally, the Proposed Project would pipe and pressurize approximately 9.6 miles of the Ashley Central Canal with 26-inch to 36-inch High-Density Polyethylene (HDPE) pipe and fittings, install turnout meters, and two screening and overflow structures. The canal would be backfilled to cover the irrigation pipe and then left open to be utilized by the County to convey floodwater. Additional elements of the Proposed Project would include the installation of approximately 3 miles of pedestrian and recreation trails, which would provide biking and walking access to educational, recreational, and commercial facilities.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.43495887513357,-109.54606056557881,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Fishes

NAME	STATUS
Bonytail *Gila elegans* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub *Gila cypha* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3930	Endangered
Razorback Sucker *Xyrauchen texanus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Utah Ecological Services Field Office
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http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2020-SLI-0205
Event Code: 06E23000-2021-E-00446
Project Name: Ashley Central Canal - Northern Piping

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2020-SLI-0205
Event Code: 06E23000-2021-E-00446
Project Name: Ashley Central Canal - Northern Piping
Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES
Project Description: The Proposed Project would construct two large debris basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City. Additionally, the Proposed Project would pipe and pressurize approximately 9.6 miles of the Ashley Central Canal with 26-inch to 36-inch High-Density Polyethylene (HDPE) pipe and fittings, install turnout meters, and two screening and overflow structures. The canal would be backfilled to cover the irrigation pipe and then left open to be utilized by the County to convey floodwater. Additional elements of the Proposed Project would include the installation of approximately 3 miles of pedestrian and recreation trails, which would provide biking and walking access to educational, recreational, and commercial facilities.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.46793951496705,-109.56119497199022,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bonytail *Gila elegans* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub *Gila cypha* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3930	Endangered
Razorback Sucker *Xyrauchen texanus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2159

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

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Utah Ecological Services Field Office
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http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2019-SLI-0566
Event Code: 06E23000-2021-E-00442
Project Name: Ashley Central Canal - Recreation Trail

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

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- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

Official Species List

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This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2019-SLI-0566
Event Code: 06E23000-2021-E-00442
Project Name: Ashley Central Canal - Recreation Trail
Project Type: ** OTHER **
Project Description: Installation of approximately 3 miles of pedestrian and recreation trails.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.452808287531276,-109.56252397571987,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Fishes

NAME	STATUS
Bonytail *Gila elegans* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub *Gila cypha* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3930	Endangered
Razorback Sucker *Xyrauchen texanus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

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Utah Ecological Services Field Office
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http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2020-SLI-0206
Event Code: 06E23000-2021-E-00444
Project Name: Ashley Central Canal - Southern Piping

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

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This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2020-SLI-0206
Event Code: 06E23000-2021-E-00444
Project Name: Ashley Central Canal - Southern Piping
Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES
Project Description: The Proposed Project would construct two large debris basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City. Additionally, the Proposed Project would pipe and pressurize approximately 9.6 miles of the Ashley Central Canal with 26-inch to 36-inch High-Density Polyethylene (HDPE) pipe and fittings, install turnout meters, and two screening and overflow structures. The canal would be backfilled to cover the irrigation pipe and then left open to be utilized by the County to convey floodwater. Additional elements of the Proposed Project would include the installation of approximately 3 miles of pedestrian and recreation trails, which would provide biking and walking access to educational, recreational, and commercial facilities.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.42019398511767,-109.49875459198276,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

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See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bonytail *Gila elegans* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub *Gila cypha* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3930	Endangered
Razorback Sucker *Xyrauchen texanus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/2159

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Utah Ecological Services Field Office
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Phone: (801) 975-3330 Fax: (801) 975-3331
http://www.fws.gov
http://www.fws.gov/utahfieldoffice/

In Reply Refer To: January 15, 2021
Consultation Code: 06E23000-2019-SLI-0568
Event Code: 06E23000-2021-E-00451
Project Name: Ashley Canal - Yellow Hill Basin - NRCS Funded

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds

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This species list is provided by:

Utah Ecological Services Field Office
2369 West Orton Circle, Suite 50
West Valley City, UT 84119-7603
(801) 975-3330

Project Summary

Consultation Code: 06E23000-2019-SLI-0568
Event Code: 06E23000-2021-E-00451
Project Name: Ashley Canal - Yellow Hill Basin - NRCS Funded
Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES
Project Description: Yellow Hill Basin - Construction of a debris basin to serve as flood control.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.46305003298594,-109.61235313292345,14z

Counties: Uintah County, Utah

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

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See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Fishes

NAME	STATUS
Bonytail *Gila elegans* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1377	Endangered
Colorado Pikeminnow (=squawfish) *Ptychocheilus lucius* Population: Wherever found, except where listed as an experimental population There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3531	Endangered
Humpback Chub *Gila cypha* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3930	Endangered
Razorback Sucker *Xyrauchen texanus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/530	Endangered

Flowering Plants

NAME	STATUS
Ute Ladies'-tresses *Spiranthes diluvialis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2159	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix 3 – Utah Natural Heritage Program Online Species Lists

Utah Division of Wildlife Resources
Utah Natural Heritage Program
1594 W. North Temple
PO Box 146301
Salt Lake City, UT 84116

Report Number: 11902
January 15, 2021

Utah Natural Heritage Program Online Species Search Report

Project Information

Project Name

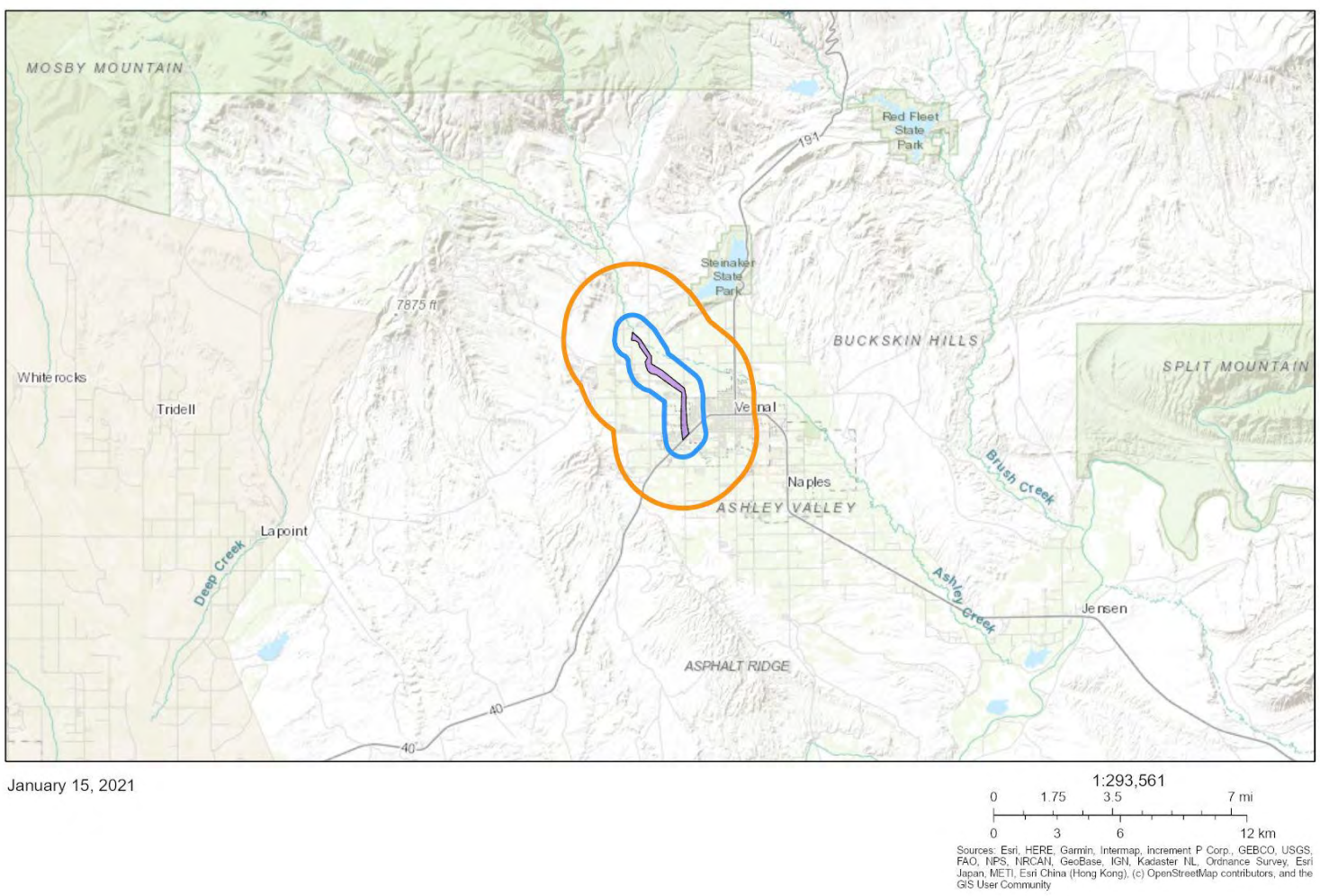
Ashley Valley Watershed Flood & Irrigation Project (northern piping)

Project Description

The Proposed Project would construct two large debris basins to serve as flood control in the Coal Mine and Yellow Hills sub-basins located northeast of Vernal City. Additionally, the Proposed Project would pipe and pressurize approximately 9.6 miles of the Ashley Central Canal with 26-inch to 36-inch High-Density Polyethylene (HDPE) pipe and fittings, install turnout meters, and two screening and overflow structures. The canal would be backfilled to cover the irrigation pipe and then left open to be utilized by the County to convey floodwater. Additional elements of the Proposed Project would include the installation of approximately 3 miles of pedestrian and recreation trails, which would provide biking and walking access to educational, recreational, and commercial facilities.

Location Description

Vernal, Utah - Ashley Central Canal



Animals within a ½ mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
White-tailed Prairie Dog	Cynomys leucurus	SGCN		2002
Wolverine	Gulo gulo	SGCN		1919

Plants within a ½ mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
Ute Ladies' Tresses	Spiranthes diluvialis		LT	2002

Animals within a 2 mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
Peregrine Falcon	Falco peregrinus	SGCN		2007
White-tailed Prairie Dog	Cynomys leucurus	SGCN		2002
Black-footed Ferret	Mustela nigripes	SGCN	LE; XN	1988
Greater Sage-grouse	Centrocercus urophasianus	SGCN		1984
Utah Milksnake	Lampropeltis triangulum	SGCN		1955
Northern Leopard Frog	Lithobates pipiens	SGCN		1951
Wolverine	Gulo gulo	SGCN		1919

Plants within a 2 mile radius

Common Name	Scientific Name	State Status	U.S. ESA Status	Last Observation Year
Ute Ladies' Tresses	Spiranthes diluvialis		LT	2020

Definitions

State Status

SGCN	Species of greatest conservation need listed in the Utah Wildlife Action Plan

U.S. Endangered Species Act

LE	A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction
LT	A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered
LE;XN	An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and nonessential" in its designated use areas in Utah
C	A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened
PT/PE	A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service

Disclaimer

The information provided in this report is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, any given response is only appropriate for its respective request.

The UDWR provides no warranty, nor accepts any liability, occurring from any incorrect, incomplete, or misleading data, or from any incorrect, incomplete, or misleading use of these data.

The results are a query of species tracked by the Utah Natural Heritage Program, which includes all species listed under the U.S. Endangered Species Act and species on the Utah Wildlife Action Plan. Other significant wildlife values might also be present on the designated site. Please contact UDWR's regional habitat manager if you have any questions.

Contact the U.S. Fish and Wildlife Service at (801) 975-3330 for the purpose of consultation under the Endangered Species Act.

Please contact our office at (801) 538-4759 or habitat@utah.gov if you require further assistance.

Your project is located in the following UDWR region(s): Northeastern region

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