

**STATE OF UTAH  
DIVISION OF WATER QUALITY  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
SALT LAKE CITY, UTAH**

**§401 Water Quality Certification No. DWQ-2007-00789**

Pursuant to §401 of the Federal Clean Water Act (CWA), the Utah Department of Environmental Quality (DEQ), Division of Water Quality (DWQ) certifies that the applicant has provided reasonable assurance that any discharges associated with the proposed project will not violate surface water quality standards, or cause additional degradation in surface water not presently meeting water quality standards. In accordance with Section 401(a)(1) of the CWA [33 U.S.C. Sec. 1341(a)(1)], DWQ hereby issues this §401 Water Quality Certification provided any listed conditions are met and included in the corresponding U.S. Army Corps of Engineers (USACE) 404 Permit.

**Applicant:** Utah Department of Transportation (UDOT) Region 2  
Ms. Oanh Le-Spradlin  
2010 South 2760 West  
Salt Lake City, Utah 84104

**Project:** The applicant is proposing to construct the Midvalley Highway between State Road 138 (SR-138) and Interstate 80 (I-80). The highway would be four lanes and would include a new interchange at I-80 and SR-138. The interchange at I-80 would consist of single-lane ramps from eastbound and westbound I-80 to southbound Midvalley Highway and from northbound Midvalley Highway to eastbound and westbound I-80. The overall purpose of the project is to meet long-term transportation needs in the Tooele Valley by increasing north-south transportation capacity and reducing anticipated congestion on SR-36 and I-80. The applicant believes there is a need to provide additional regional mobility to the area.

**Location:** The project is located between I-80 and SR- 138, in Tooele County, Utah. Latitude 40.60508°, Longitude -112.296258°

**Watercourse(s):** 5 Unnamed Tributaries (streams) to the Great Salt Lake, Six-mile canal, and 12 Wetlands located in Great Salt Lake Desert Watershed.

**Effective Date:** **May X, 2019**

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Erica Brown Gaddis, PhD  
Director, Division Water Quality

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## Section 1: Background:

### I. Other Applicable Permits:

1. USACE 404 Permit No.: SPK-2007-00789

### II. Project Description/Purpose:

The applicant is proposing to construct the Midvalley Highway between State Road 138 (SR-138) and Interstate 80 (I-80). The highway would be four lanes and would include a new interchange at I-80 and SR-138. The interchange at I-80 would consist of single-lane ramps from eastbound and westbound I-80 to southbound Midvalley Highway and from northbound Midvalley Highway to eastbound and westbound I-80. Based on the available information, the overall project purpose is to meet long-term transportation needs in the Tooele Valley by increasing north-south transportation capacity and reducing anticipated congestion on SR-36 and I-80. The applicant believes there is a need to provide additional regional mobility to the area.

### III. Site Description:

There are approximately 34.49 acres of wet meadow, 1.56 acres of emergent marsh, 63.96 acres of vegetative mineral flat, 5,627 linear feet of stream, and 2,037 linear feet of canal/ditches present within the project area. The project site is situated in the center of the arid Tooele Valley on the plain of historic Lake Bonneville, approximately 1.5-2.0 miles south of the southern shore of the Great Salt Lake. The area has slightly undulating terrain, with elevations ranging from approximately 2,226-4,230 feet. The site is characterized by relatively flat non-irrigated lands with convex depressions composed of sparsely-vegetated barren flats and higher elevations dominated by scrub-shrub vegetation.

### IV. Proposed Alterations/ Mitigation

UDOT is proposing to permanently impact 0.494 acres wet meadow, 0.172 acres emergent marsh, 10.903 acres of vegetated mudflats, 974 linear feet of unnamed stream, and 192 linear feet of Six-Mile Canal. Additionally, UDOT proposes temporarily impacting 0.092 acres wet meadow, 0.043 acres emergent marsh, 0.729 acres vegetated mudflats, and 36 linear feet of unnamed stream. UDOT plans to purchase credits from the Machine Lake Mitigation Bank at a ratio of 1.5: 1.

## **Section 2: Certification Conditions:**

### **I. Project Specific Conditions:**

#### **1. Bridges, Culverts, and Fill**

- a. Wetlands outside of the permitted impact area shall be clearly marked to prevent unintentional/additional impacts to water features.
- b. Construction of bridges/culverts shall be conducted in the “dry” to the maximum extent practicable, by diverting flow utilizing cofferdams, berms constructed of sandbags, clean rock (containing no fine sediment) or other non-erodible, non-toxic material. All diversion materials shall be removed at the completion of the work.
- c. The bottom of culverts shall be installed below streambed elevation in a manner that allows for natural substrate to reestablish. All culverts with more than one barrel shall have base flow concentrated into one barrel.
- d. The culverts should not result in a disruption or cause a barrier to the movement of fish or other aquatic life on the downstream side.

#### **2. Mitigation**

- a. The cut ditch associated with the loss of S-1 shall mimic the impacted stream section to the extent practicable. At a minimum the ditch shall be an open channel with similar substrate and banks stabilized with appropriate native vegetation.
- b. The banks of the minor ditches proposed to hydrologically connect MF-5 shall be stabilized with Native vegetation.

### **II. General Conditions:**

#### **1. Good Housekeeping**

- a. Applicant and their subcontractors shall ensure that all workers involved are continuously aware of the water quality protection measures before the start and during the construction period.
- b. Retain a copy of this §401 Certification and its affiliated USACE 404 Permit onsite.

## 2. Stormwater and BMPs

- a. Water quality standards in associated water resources could be violated unless appropriate Best Management Practices (BMPs) are incorporated to minimize the erosion-sediment and nutrient load to any adjacent waters during project construction. The applicant shall not use any fill material which may leach organic chemicals (e.g. discarded asphalt), noxious weeds/seeds or nutrients (e.g., phosphate rock) into waters of the State.
- b. Construction activities that disturb one acre or more, or are part of a common plan of development, are required to obtain coverage under the Utah Pollutant Discharge Elimination System (UPDES) Stormwater General Permit for Construction Activities, Permit No. UTR300000<sup>[1]</sup>. The permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) to be implemented and updated from the commencement of any soil disturbing activities at the site, until final stabilization of the project. The SWPPP should include, but not limited to, final site maps and legible plans, location of stormwater outfalls/discharges, as well as information pertaining to any stormwater retention requirements.
- c. Dewatering activities, if necessary during construction, may require coverage under the UPDES General Permit for Construction Dewatering, Permit No. UTG070000<sup>[2]</sup>. The permit requires water quality monitoring every two weeks to ensure that the pumped water is meeting permit effluent limitations, unless water is contained onsite.
- d. A project within a Municipal Separate Storm Sewer System (MS4) jurisdiction, must comply with all the conditions required in that UPDES MS4 Permit and associated ordinances. No condition of this 401 Certification shall reduce or minimize any requirements provided in the MS4 Permit. In the case of conflicting requirements, the most stringent criteria shall apply.
- e. Utah Administrative Code R317-2 requires that the Applicant cannot increase water turbidity by 10 NTUs. If violated shall immediately notify the DWQ. A fact sheet describing the Utah Department of Environmental Quality's (DEQ) recommended environmental BMPs for construction sites are located on our web site <sup>[3]</sup>.

## 3. Spills

- a. Refueling equipment and storage of lubricants and fuels will occur at designated staging areas and in state approved containers. The storage and refueling areas will be at least 500 feet from the edge of the nearest waterbody (including wetlands), at least 200 feet from the nearest private water supply well, and at least 100 feet from the nearest municipal water supply well.
- b. Utah Annotated Code 19-5-114 requires that any spill or discharge of oil or other substances which may cause pollution to waters of the State, including wetlands, must be immediately

reported to the Utah DEQ Spill Hotline at (801) 536-4123, a 24-hour phone number.

**Section 3: Aquatic Resource Impacts:** All Waters of the State of Utah (defined in Administrative Code (UAC) R317-1-1) are protected from pollutant discharges that affect water quality by narrative standards (*see* UAC R317-2-7.2); broadly, discharges should not become offensive or cause undesirable conditions in human health effects of aquatic life. In addition, some particularly sensitive classes of water are further protected from deleterious effects of specific pollutants by application of numeric criteria to designated (beneficial) uses of that water body. Listed below are the water features within the project area and their associated designated beneficial uses (*see* UAC R317-2-6):

I. Impacts to Linear Water Features

1. Impacts to unnamed streams, including irrigation and/or drainage canals & Ditches

- a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is low likelihood of ingestion of water or low degree of bodily contact with the water.
- b. Class 3E: Severely habitat-limited waters. Narrative Standards will be applied to protect these waters for aquatic wildlife.
- c. Class 4: Protected for agricultural uses including irrigation of crops and stock watering.

II. Impacts to Wetlands

1. Wetlands in the Mid-Valley Highway project area that lie above the Great Salt Lake Meander Line (above approximate elevation of 4208 feet above sea level):

- a. Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is low likelihood of ingestion of water or low degree of bodily contact with the water.
- b. Class 3D: Protected for waterfowl, shore birds, and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary organisms in their food chain.

**Section 4: Modifications:**

- 1. Without limiting DWQ's discretion to take other actions in accordance with UAC R317-15, and, as applicable, 33 USC 1341, DWQ may modify the Certification to add, delete, or modify the conditions in this Certification as necessary and feasible to address:

- a. Adverse or potential adverse project effects on water quality of designated beneficial uses that did not exist or were not reasonably apparent when this certification was issued;
- b. TMDLs;
- c. Changes in water quality standards;
- d. Any failure of Certification conditions to protect water quality or designated uses when the Certification was issued; or
- e. Any change in the Project or its operations that will adversely affect water quality of designated beneficial uses when this Certification was issued.

## **Section 5: Other Information**

### **I. Fees:**

1. The legislatively-mandated fee for the 2019 fiscal year is \$100.00/hour, for review and issuance of the §401 Water Quality Certification [<sup>4</sup>]. A quarterly invoice will be sent once plans have been approved. Your payment is due within 30 days.

### **II. Liabilities:**

1. Applicant must acquire all necessary easements, access authorizations and permits to ensure they are able to implement the project. This §401 Certification does not convey any property rights or exclusive privileges, nor does it authorize access or injury to private property.
2. This §401 Certification does not preclude the applicant's responsibility of complying with all applicable Federal, State or local laws, regulations or ordinances, including water quality standards. Permit coverage does not release the applicant from any liability or penalty, should violations to the permit terms and conditions or Federal or State Laws occur.

## **Section 6: Public Notice and Comments**

### **I. Public Notice Dates:**

1. USACE Permit No. SPK-2007-00789: 10/26/18 – 11/26/18
2. Utah DEQ Certification No. DWQ-2018-00256:

### **II. Public Notice Comments:**

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**Appendix A**

Site Location/ Alignment

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Figure 1-1. Project Vicinity: Tooele County, Utah



## **Appendix B**

### Impacts to Waters of the State Overview

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Figure D-1. Impacts to waters of the U.S., overview.

Table A-1. Waters Of The United States (WOTUS) Impact Totals

| WOTUS Feature ID | PROPOSED IMPACT TOTALS |                  |                  |                  |                        |                  |                        |                   |                |                | Cowardin Classification (comment)  |
|------------------|------------------------|------------------|------------------|------------------|------------------------|------------------|------------------------|-------------------|----------------|----------------|--|
|                  | Wetlands               |                  |                  |                  | Other WOTUS            |                  |                        |                   |                |                |  |
|                  | Wet Meadow             |                  | Emergent Marsh   |                  | Vegetated Mineral Flat |                  | Stream and Canal/Ditch |                   |                |                |  |
|                  | Permanent (acre)       | Temporary (acre) | Permanent (acre) | Temporary (acre) | Permanent (acre)       | Temporary (acre) | Permanent (acre)*      | Temporary (acre)* | Permanent (LF) | Temporary (LF) |  |
| WM-1             | 0.005                  | 0.000            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-2             | 0.323                  | 0.039            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-3             | 0.000                  | 0.000            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-4             | 0.158                  | 0.044            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-5             | 0.008                  | 0.010            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-6             | 0.000                  | 0.000            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| WM-7             | 0.000                  | 0.000            |                  |                  |                        |                  |                        |                   |                |                | PEM  |
| EM-1             |                        |                  | 0.172            | 0.043            |                        |                  |                        |                   |                |                | PEM  |
| EM-2             |                        |                  | 0.000            | 0.000            |                        |                  |                        |                   |                |                | PEM  |
| MF-1             |                        |                  |                  |                  | N/A                    | N/A              |                        |                   |                |                | PUB - Isolated (2/6/2017)  |
| MF-2             |                        |                  |                  |                  | 1.392                  | 0.081            |                        |                   |                |                | PUB  |
| MF-3             |                        |                  |                  |                  | 0.390                  | 0.042            |                        |                   |                |                | PUB  |
| MF-4             |                        |                  |                  |                  | 3.949                  | 0.221            |                        |                   |                |                | PUB  |
| MF-5             |                        |                  |                  |                  | 3.188                  | 0.145            |                        |                   |                |                | PUB  |
| MF-6             |                        |                  |                  |                  | 1.316                  | 0.155            |                        |                   |                |                | PUB  |
| MF-7             |                        |                  |                  |                  | 0.000                  | 0.000            |                        |                   |                |                | PUB  |
| MF-8             |                        |                  |                  |                  | 0.000                  | 0.000            |                        |                   |                |                | PUB  |
| MF-9             |                        |                  |                  |                  | 0.658                  | 0.077            |                        |                   |                |                | PUB  |
| MF-10            |                        |                  |                  |                  | 0.000                  | 0.000            |                        |                   |                |                | PUB  |
| MF-11            |                        |                  |                  |                  | 0.010                  | 0.008            |                        |                   |                |                | PUB  |
| S-1              |                        |                  |                  |                  |                        |                  | 0.018                  | 0.020             | 390            | 444            | R6 (Stream) - connected to S-2 via existing culvert, 2-foot wide           |
| S-2              |                        |                  |                  |                  |                        |                  | 0.000                  | 0.000             | 0              | 0              | R6 (Stream) - connected to S-1 and S-3 via existing culverts               |
| S-3              |                        |                  |                  |                  |                        |                  | 0.002                  | 0.003             | 8              | 14             | R6 (Stream) - connected to S-2 via existing culvert, 10-foot wide (impact) |
| S-5              |                        |                  |                  |                  |                        |                  | 0.001                  | 0.001             | 16             | 12             | R6 (Stream) - connected to S-6 via existing culvert, 2-foot wide           |
| S-6              |                        |                  |                  |                  |                        |                  | 0.005                  | 0.000             | 101            | 5              | R6 (Stream) - connected to S-5 via existing culvert, 2-foot wide           |
| S-7              |                        |                  |                  |                  |                        |                  | 0.000                  | 0.000             | 0              | 0              | R6 (Stream)  |
| S-8              |                        |                  |                  |                  |                        |                  | 0.002                  | 0.001             | 15             | 6              | R6 (Stream), 6-foot wide (impact)  |
| D-1              |                        |                  |                  |                  |                        |                  | 0.044                  | 0.000             | 192            | 0              | R2UB (Six-Mile Canal), 10-foot wide  |
| D-2              |                        |                  |                  |                  |                        |                  | 0.000                  | 0.000             | 0              | 0              | Irrigation Ditch   |
| D-3              |                        |                  |                  |                  |                        |                  | 0.000                  | 0.000             | 0              | 0              | Irrigation Ditch   |
| TOTALS           | 0.494                  | 0.093            | 0.172            | 0.043            | 10.903                 | 0.729            | 0.071                  | 0.025             | 722            | 481            |  |

## Appendix C

### Mitigation

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| <b>MIDVALLEY HIGHWAY – MACHINE LAKE MITIGATION BANK CREDIT PROPOSAL</b> |               |   |               |  |                                      |
|---|---------------|---|---------------|--|--------------------------------------|
| <b>MIDVALLEY HIGHWAY IMPACTS</b>  |               | <b>MACHINE LAKE MITIGATION BANK CREDITS</b> |               |  |                                      |
| Habitat Type  | Acres         | Habitat Type                                | Ratio (Type)  | Watershed Ratio (Impact vs Mitigation) | Machine Lake Bank Mitigation Credits |
| Vegetated Mineral Flat  | <b>10.846</b> | Mudflat                                     | 1:1 (In-Kind) | 1.5:1                                  | <b>16.27</b>                         |
| Wet Meadow  | <b>0.494</b>  | Saline Wet Meadow                           | 1:1 (In-Kind) | 1.5:1                                  | <b>0.74</b>                          |
| Emergent Marsh  | <b>0.172</b>  | Marsh                                       | 1:1 (In-Kind) | 1.5:1                                  | <b>0.26</b>                          |
| <b>IMPACT TOTAL =</b>   | <b>11.512</b> | <b>CREDIT TOTAL =</b>                       |               |  | <b>17.27</b>                         |

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