



## MEMORANDUM

DATE: March 31, 2023  
TO: John Usery, Arctaic  
FROM: Heather Houston, Birch Ecology  
RE: Wetland Delineation - 780 Little Beaver Trail

Birch Ecology conducted a wetland delineation of the 780 Little Beaver Trail project site in Dillon Colorado on July 27, 2022. The delineation was conducted in accordance with the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and the 2010 Regional Supplement for the Western Mountains, Valleys, and Coast.

The surveyed wetland boundary is illustrated by the attached Figure 1. As shown by the map, the Straight Creek Wetland covers about 8,545 square feet (0.20 acre). There is a sharp topographic break and change in vegetation at the wetland edge, so the boundary is well-defined by field indicators. The wetland has a dense shrubby overstory dominated by willows (*Salix monticola*; *S. planifolia*; *S. Drummondiana*), and the bordering uplands are dominated by introduced grasses and weeds.



**Photo 1. Panoramic view of the south edge of the Straight Creek Wetland with weedy upland vegetation in the foreground.**

Please note, we have not yet prepared a formal Wetland Delineation Report for the U.S. Army Corps of Engineers. If required, we can complete this step to officially certify the boundary is accurately mapped. Once approved, the boundary would be valid for five years. However it is our understanding that the project is being designed to avoid wetland impacts, so this step may not be necessary. If required for your approvals with the Town of Dillon, we can prepare a delineation report in accordance with Corps standards.



**Photo 2. The Straight Creek Wetland has a dense shrubby overstory dominated by willows with beaked sedge and bluejoint reedgrass in the herbaceous understory.**

**Figure 1. Draft Wetland Map  
780 Little Beaver Trail  
Dillon, Colorado**

**LEGEND:**

-  Wetlands\*
-  Straight Creek
-  75-Foot Wetland Setback
-  Property Boundary
-  Pit 1 Soil Pits

\* Wetland Boundary has not yet been reviewed or approved by the U.S. Army Corps of Engineers



Straight Creek Wetland  
8,545 SF  
(0.20 ac)

75-Setback to Delineated Wetlands



Date: March 2023  
Contour Interval = 1 ft  
Scale: 1 in = 35 ft

Wetland flagging was surveyed by NV5 of Denver, CO.

prepared by:



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## ***APPENDIX 17-C Wetlands Regulations***

### **1.FINDINGS.**

- A. The wetlands of the Town of Dillon are a valuable natural resource requiring careful management to maintain their usefulness to public health, safety and welfare.
- B. In their natural state, wetlands serve to control flooding and water pollution, buffer streams and lakes against sediment impacts and maintain supplies of potable ground water and surface water.
- C. Wetlands provide high quality wildlife habitat and offer opportunities for recreation, scientific study and natural resource education.
- D. The Town Council hereby finds and determines as follows:
  - 1. Several drainages are contained within the Town and are located on both sides of US Highway 6. These drainages include herbaceous vegetation, a wetlands complex and open water bodies. Identified wetlands include the areas along Little Beaver Trail and the Dillon Ridge Marketplace. These areas are important and unique, deserving of special protection by the Town.
  - 2. Wetlands areas provide habitat for over two hundred sixty-two (262) species in Summit County.
  - 3. The East Dillon area includes fen wetlands, which are considered a Resource Category 1 by the United States Fish and Wildlife Service and are considered to be an irreplaceable resource. The wetlands complex of the East Dillon area has been designated as an "Aquatic Resource of National Importance" by the United States Environmental Protection Agency.
  - 4. Much of the East Dillon area is projected to be developed in the near future. Additionally, the area is used for both summer and winter recreation, including hiking, biking, snowshoeing, Nordic skiing and other activities. If not granted special protection by the Town, the unique and valuable assets associated with the area may be lost or irreparably damaged.
  - 5. In adopting these regulations, the Town Council has relied upon the Summit County Conservation Inventory (1997) by the Colorado Natural Heritage Program. This report contains factual information concerning the East Dillon area, which has been considered by the Town Council in connection with its decision to adopt these regulations.

**2.PURPOSE.** These regulations are adopted for the purpose of preserving and improving the public health, safety and general welfare of the citizens of the Town. More specifically, it is the purpose of these regulations to:

- A. Limit human disturbance of the wetland areas insofar as possible and to thereby keep the impacts associated with human intrusion as minimal as possible.
- B. Establish a buffer area around the important natural resources portions of the wetlands where development and other activities are minimized in order to maintain and enhance the aesthetics and biodiversity of the areas and to enable the natural resources of the areas to function without being compromised.
- C. Prohibit activities that could have a major or irreversible impact within the wetlands areas until hydrologic and fen wetland studies are conducted and analyzed and changes to the boundary line of the wetlands are warranted.
- D. Provide for the establishment and enforcement of wildlife movement corridors in upland areas of East Dillon.

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- E. Promote Best Management Practices to provide a framework that ensures, insofar as possible, that activities in and around wetlands areas are compatible with the protection of the wetland resources.
- F. Commit the Town to adopt Water Quality Protection Standards based on those developed by the Northwest Colorado Council of Governments for use in connection with any development that occurs in the Town.

**3. DEFINITIONS.** Terms used in these regulations shall have the meanings provided in the Town of Dillon Land Development Code. When used in these regulations, the following terms shall have the following meanings:

*Best Management Practices (BMPs)* are those practices described in Appendix 17-B, which are intended to provide a framework that ensures activities in and around the Town of Dillon are compatible with the protection of its resources. These practices shall include, but not be limited to: structural and nonstructural methods, measures or practices implemented to prevent, reduce or mitigate adverse water quality impacts resulting from construction and operation of a project.

*CDPS* means the Colorado Discharge Permit System

*Dillon Bay Fen* is the geographic area of the Town of Dillon, which includes the clustered sedge meadow type of fen wetland as depicted and described on Exhibit A, a copy of which is on file at the Clerk's office.

*Fen wetland* means a peat-accumulating wetland that is supported by groundwater discharge.

*Land Development Code* means the Town of Dillon Land Development Code as adopted by Ordinance No. 19, Series 1996, and as subsequently amended.

*National Wetlands Inventory (NWI)* is a series of maps produced by the U.S. Fish and Wildlife Service showing the location and classification of wetlands in standard topographical areas.

*Regulations* means the regulations adopted by the ordinance codified herein, as amended from time to time.

*Town* means the Town of Dillon.

*Water body* means any land area containing surface water such as a stream, river, pond, lake, wetland or reservoir on a perennial or intermittent basis. A perennial water body is one that normally holds water or flows continuously during all of the calendar year as a result of groundwater discharge or surface runoff. An intermittent water body is one that is shown as an intermittent water feature on the U.S. Geological Survey 7.5 Minute Series Topographical Maps.

*Wetland Buffer Area (WBA)* means that area surrounding a wetland which is regulated for the purpose of protecting the resources within the actual wetland boundary.

*Wetlands District* means those areas which are generally depicted as wetlands on Exhibit A, a copy of which is on file at the Clerk's office, and those other areas within the Town of Dillon subsequently identified as wetlands by others and approved by the United States Army Corps of Engineers in accordance with the definition of wetlands (33 C.F.R) and applicable law.

*Wetland* means any wetland area that meets any of the following criteria:

1. Is habitat for state or federally listed threatened or endangered species,
2. Is part of a beaver complex,
3. Is adjacent to a water body

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4. Is identified as a wetland area that appears on the most current NWI map or maps published by the U.S. Fish and Wildlife Service. The most current edition of the applicable NWI map or maps and any subsequent revisions thereto are hereby adopted by reference and declared to be part of this subchapter. *Wetlands* of different NWI classifications that are hydrologically linked shall be considered a single *wetland*. A *wetland* must also meet the standards of the 1987 U.S.A.C.E. Wetlands Delineation Manual applied according to the procedures set forth below.
5. Is an area inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. *Wetland* does not include man-made ponds built for the purpose of detaining runoff.

*USACE* means the United States Army Corps of Engineers

**4.AREA OF APPLICABILITY.** These regulations shall apply only to wetlands within the Town. The boundaries of the Town may be amended from time to time to include land that is annexed to the Town subsequent to the adoption of these regulations and which the Town Council determines should be subjected to the provisions hereof in order to further the purpose and intent of these regulations.

**5.WETLAND BUFFER AREA.**

- 5.1 WBA created. Within the Town the WBA is hereby created.
- 5.2 WBA general. In general terms, the WBA is intended to create a buffer area in which native vegetation is maintained and human activities and disturbance of the WBA is kept to a minimum.
- 5.3 WBA boundaries. As generally depicted on Exhibit A, the WBA boundary shall be:
  - A. One hundred fifty (150) feet from the edges of fen wetlands;
  - B. Seventy-five (75) feet from the edges of wetlands containing principal water bodies, because of their role as habitat; and
  - C. Fifty (50) feet from the edges of all other wetlands.
- 5.4 Wetlands Delineation Report. All applicants for development of a lot or lots containing a wetland or abutting a Wetlands District shall obtain a precise delineation of WBA boundaries, specifically identifying fen wetlands, wetlands containing principal water bodies, and all other wetlands, through the completion of a full field survey applying the standards of the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual. The applicant shall submit a report and scaled drawing of the precise delineation to the Town Engineer for review in concurrence with the development application. If determined accurate by the Town Engineer, the precise delineation shall serve to delineate the WBA boundaries with respect to the proposed development in lieu of the depiction on Exhibit A.
- 5.5 Prohibited activities within the WBA. The following activities are prohibited within the WBA, unless specifically approved by the Town pursuant to Section 11 of these regulations, "Variance Procedures."
  - A. New building construction, erection or placement or increase in size of an existing building footprint.
  - B. New road construction.
  - C. Placement of material such as soil or gravel, except when specifically permitted pursuant to Section 5.6.
  - D. Removal or excavation of material such as soil, gravel or vegetation, except when specifically permitted pursuant to Section 5.6.

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- E. Vegetative cutting or clearing, except (1) for maintenance of forest health as determined by the Town in consultation with the US Forest Service or Colorado State Forest Service, or (2) when specifically permitted pursuant to Section 5.6. All areas disturbed pursuant to one of the foregoing exceptions with one shall be revegetated in accordance with Section 10.C.
  - F. Storage of hazardous materials/waste.
  - G. Construction of water improvement facilities such as detention ponds, unless located on non-wetland areas of the WBA, or when specifically permitted pursuant to Section 5.6. Approval by applicable regulatory agencies must be obtained.
- 5.6 Permitted uses and activities within the WBA. The following uses and activities are permitted within the WBA, provided that such uses and activities (i) comply with the water quality protection standards of Appendix 17-B, (ii) are conducted in a way that avoids or minimizes adverse impacts on wetlands, and (iii) do not occur within the boundary of any wetland as determined by the wetlands delineation report required pursuant to Section 5.4.
- A. Maintenance, repair, replacement, removal, deconstruction, and resurfacing of existing streets, roads, highways, driveways, parking lots, recreation paths, sidewalks, structures, and public and private utilities, provided that such uses are not enlarged.
  - B. Surfacing of existing gravel or dirt parking lots, if adequate drainage is provided to control runoff.
  - C. Installation, maintenance, repair, replacement, deconstruction, and removal of improvements required for compliance with the ADA Standards for Accessible Design, such as new sidewalks, concrete slabs, ramps, retaining walls, site grading, and fill to accomplish ADA-compliant grades, when necessary in connection with another use or activity permitted by this Section.
  - D. Excavation, fill, and grading, when such activities are necessary in connection with another use or activity permitted by this Section.
  - E. Installation, maintenance, repair, replacement, deconstruction, and removal of stairs, walkways, ramps, and utility and electrical installations to serve existing or replacement structures, provided there is no practicable alternative outside of the WBA.
  - F. Installation, maintenance, repair, replacement, deconstruction, and removal of landscape installations and irrigation systems, provided adequate mechanisms are provided to control runoff and prevent erosion.
  - G. Installation, maintenance, repair, replacement, deconstruction, and removal of curb and gutter, drainage pans, retaining walls, and storm drain pipes and inlets, when necessary to serve a use permitted under this Section, and when designed to control runoff from paved surfaces or prevent erosion.
  - H. Parks, when left in a natural state, wildlife and nature preserves, recreational uses limited to natural surface hiking and educational uses.
  - I. Public infrastructure, other than buildings and electrical substations, but including public utilities, signs, streets, roads, streetlights, electrical conduit, parking lots, recreation paths, sidewalks, and bridges, provided that:
    - 1. There is no practicable alternative route outside the WBA;
    - 2. The public need cannot be met by existing facilities or the modification thereof;

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3. The proposed facility is designed to allow the unimpeded circulation of water in the wetland, control runoff from paved surfaces and otherwise minimize adverse impacts on the wetland;
  4. Any filling, excavating or draining that is necessary for the construction of the proposed facility must be done in a way that minimizes adverse impacts on the wetland;
  5. Erosion control measures are implemented in accordance with the Town Erosion and Sedimentation Control Standards; and
  6. Underground utilities are installed in watertight conduits sufficient to maintain the existing hydrology and to contain pipeline breaks.
- J. Stormwater collection, provided that there is no practicable alternative site outside the WBA and that a plan is prepared by the applicant and approved by the Town Engineer listing steps for monitoring surface and subsurface water quality and a schedule of periodic maintenance of the facility while in use as a stormwater collection facility; and further provided that net flow does not exceed the wetland's natural water storage capacity and that the stormwater undergoes pretreatment as described in subparagraph (2) to prevent silt, debris and pollutants from entering the wetland.
1. No permit for stormwater collection use of a wetland shall involve decreasing the wetland's natural water storage capacity or placing more than twenty-five percent (25%) of the surface area of a constructed collection basin in the Wetlands District. The natural outflow from a Wetlands District shall not be changed so as to increase or decrease the normal pool elevation.
  2. Pre-treatment measures may include sedimentation basins, vegetated swales and buffer strips. Riprap made of natural rock may be used only where vegetation cannot control erosion. Storm drains may not discharge directly into a wetland. Lining of swales with paving materials shall not be permitted.
  3. No more than one (1) constructed collection basin may be placed within any single lot within the Wetlands District.
- K. Maintenance, repair, replacement, deconstruction, and removal of existing buildings; provided that, such activities do not result in an expansion in the building footprint, and are conducted in such a way that avoids or minimizes adverse impacts on wetlands.

(Ord. 09-21 §9; Ord. 07-22 , §1)

**6.FURTHER STUDIES.** The Town may conduct or allow others to conduct further studies, including resource mapping, of the hydrology of the Town, wildlife corridors and the description and delineation of wetlands, wetland districts and fen wetlands, as it deems necessary. The results of such studies shall be used by the Town to revise these regulations as appropriate.

**7.PERMIT CONDITIONS.** In connection with the approval of a development permit for development within the Town, the Planning and Zoning Commission and the Town Council shall have the power to impose such conditions of approval as may be reasonably necessary to implement the purposes of these regulations. Such conditions may include:

- A. Wetlands Delineation Report. Without limitation, for a development permit or approval of a development application, the applicant shall obtain precise delineation through the completion of a full field survey applying the standards of the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual. All permit applications for development of a lot or lots containing a wetland or abutting a Wetlands District shall be accompanied by a scaled drawing showing the wetland boundary.



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- B. Best Management Practices. The Best Management Practices set forth in this paragraph shall be applied to any new development occurring within the Town boundaries. Such Best Management Practices shall be implemented by the landowner executing and recording with the Summit County Clerk and Recorder one (1) or more restrictive covenants, which is acceptable in form and substance to the Town Attorney. The Town shall be party to and shall have the authority to enforce such covenants. The Best Management Practices to be applied to new development pursuant to this paragraph are as follows:
1. Undeveloped common areas of a development shall be managed to retain natural and habitat values. Vegetation clearing shall be avoided within identified wildlife movement corridors.
  2. Landscaping shall consist primarily of native vegetation. Property owners shall consult with the Town to determine appropriate native plants. Invasive weeds shall be removed.
  3. The use of fertilizer and pesticides shall be minimized by incorporating the principles of integrated pest management. Any fertilizer, herbicide or pesticide used shall be applied in accordance with the manufacturer's directions.
  4. Trails not approved by the Town shall not be established. Trails not approved by the Town shall be closed using signage and other physical measures and be revegetated using plants native to the immediate area.
  5. Associated construction activities in wetlands or within stream banks are prohibited.
  6. Trash, litter and other material that could attract wildlife shall be stored in animal-proof containers.

**8. NEW ROADS.** New roads constructed within the Town of Dillon and inside of WBAs may be required to have passageways to provide for wildlife movement. The location, size and interval of such passageways shall require approval of the Town in consultation with the Colorado Department of Wildlife or other qualified biologists.

**9. HYDROLOGY.** Modifications to the hydrology shall not result in detrimental effects to the wetland and water quality resources of the Town of Dillon.

**10. DEVELOPMENT STANDARDS.** Development within the Town shall be subject to the following standards:

- A. Development adjacent to a WBA shall be designed to maximize the distance between disturbances and the WBA. Buildings and landscaping will be concentrated to maximize areas left undisturbed as potential habitat.
- B. When permitted under Section 5.6 or pursuant to Section 11, impervious surfaces shall be minimized to the extent practicable.
- C. Disturbed vegetation in landscaped or natural areas will be restored to provide similar biological functions, based on percent cover and type of species. Revegetation shall consist of Colorado native plants that are found in the vicinity and shall be completed as soon as possible.
- D. New recreation uses shall utilize plantings, boulders and other natural features to route visitors away from WBAs.
- E. Construction activities shall employ methods to minimize soil erosion and resulting sedimentation, including silt fences, temporary revegetation of long-term construction sites, avoidance of slopes greater than twenty percent (20%), managing stormwater runoff and other methods.

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- F. Soil storage piles shall not be placed within twenty-five (25) feet of the boundary of a Wetlands District. Erosion from all soil storage piles placed within two hundred (200) feet of the boundary of a Wetlands District shall be prevented by the placement of effective containment barriers around the piles.
- G. Stormwater runoff from all developments directed into a Wetlands District shall be as provided in Section 5.6(J) of these regulations.
- H. Components consistent with the Town's Water Quality Protection Standards shall be incorporated in construction activities to address potential impacts from stormwater runoff, snow storage and impervious surfaces.
- I. Fencing shall be avoided, unless specifically designed to allow for or facilitate wildlife movement, for controlling personal pets or for the safety of the residents.

(Ord. 09-21 §10; Ord. 07-22 , §2)

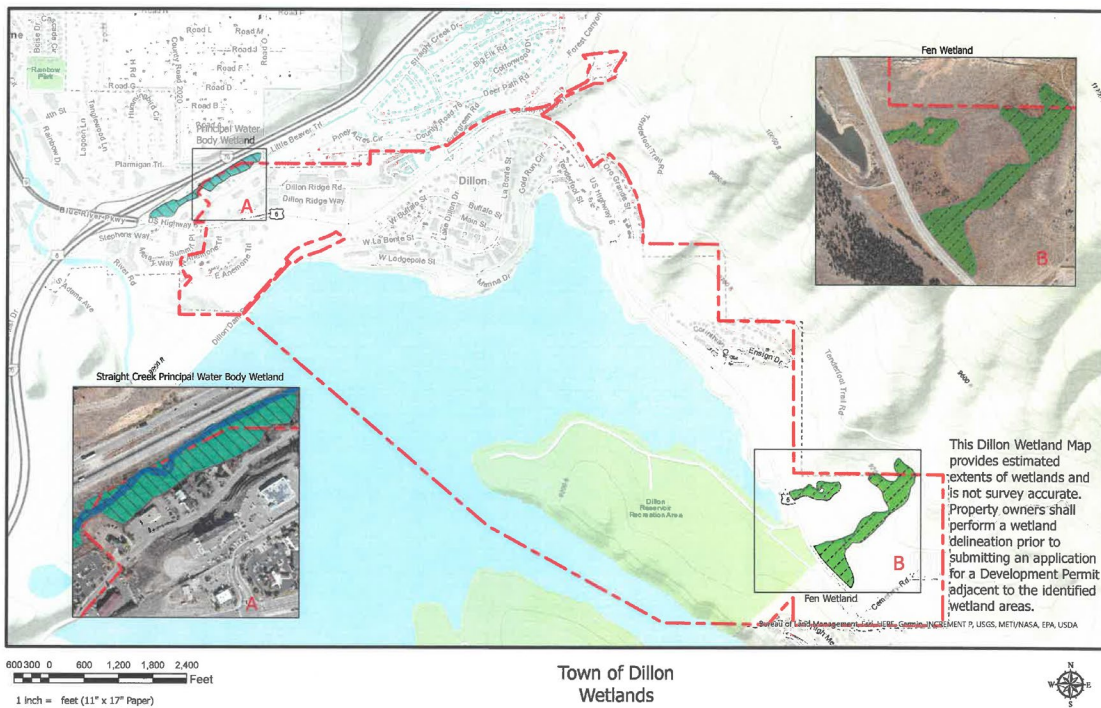
**11.VARIANCE PROCEDURES.**

- A. The Town Council may grant a variance of any requirement of these regulations upon the submission of a Class I application by a developer or owner of property subject to these regulations. A variance shall be granted only upon finding that (a) a strict application of these regulations would, when regarded as a whole, result in compensable taking of the property; or (b) the purposes of these regulations will be adequately served by an alternative proposal or requirement (including any required mitigation) and (c) the granting of the variance will not result in a substantial degradation of the natural and wildlife features of WBAs and wetland areas as determined by the Town Council and (d) there is no other practical alternative. No variance by itself or in combination with other variances shall have the effect of nullifying the intent and purpose of these regulations.
- B. No variance shall allow a net loss of wetland area. Where all or part of a wetland in a Wetlands District would be destroyed or substantially altered by a proposed development, the Town Council shall require mitigation by the applicant and his/her successors in interest according to the following standards:
  - 1. Acre-for-acre replacement of lost wetlands with constructed wetlands providing the same or superior quality and environmental benefits with regards to function and values of the wetlands.
  - 2. Replacement wetlands shall be located adjacent to the Wetlands District in which the losses are sustained and shall become part of the same Wetlands District.
  - 3. Periodic maintenance of replacement wetlands shall be carried out by the applicant or by his/her successors in interest for a minimum of three (3) years to control erosion, remove nuisance vegetation and assure the establishment and survival of hydrophytic vegetation.
  - 4. The Town Council may require the applicant to post a bond or other acceptable performance guarantee sufficient to assure the Town of Dillon the satisfactory completion of replacement wetlands.
  - 5. If replacement wetlands cannot be created that will provide the same or superior quality at a site adjacent to the wetlands community in which the projected losses would be sustained, the Town Council may permit replacement at a ratio of no less than 2:1 in as close proximity as possible to the wetlands community.

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6. The Town Council may require replacement of wetland losses even when the applicant has received federal or state approval for the proposed development without mitigative conditions.
- C. Any person who contests the delineation of the boundary line of a wetland or WBA boundary shall be provided with a reasonable opportunity to present his or her case to the Town Council. The case of a person contesting the location of the boundary line of a wetland area or WBA shall be processed as a Class I application. Such person shall submit sufficient technical data from reliable, expert sources in support of his or her case. The Town Council shall not change a boundary of a wetlands area or WBA unless the technical information presented clearly and conclusively establishes that the mapped location is incorrect or inappropriate or that, in a special geographical area, the purposes of these regulations would not be served by the delineation of such wetland area or WBA boundary.

**EXH. A. WETLAND MAP.**



(Ord. 09-21 §6(Exh. A))