

# SALT LAKE COUNTY FLOOD CONTROL

## PERMIT APPLICATION GUIDE

*This is general information and guidelines only. All information is subject to change by SLCO Flood Control at any time. While typical examples are used, each permit is unique and will be evaluated on its own merits.*

A Salt Lake County (SLCO) Flood Control Permit (FCP) is required for any activity occurring within twenty feet of the top of bank of a SLCO Flood Control Facility. See a list of Flood Control Facilities on pages 5-7.

Activity includes, but is not limited to, the installation of structures such as stairs or bridges, adding or removing fill, storm water discharge, aerial crossings, bank stabilization, bores, landscaping, etc. The property owner is responsible for ensuring that all activities are properly permitted by the division. If you aren't sure whether a project requires a permit, please inquire. Proceeding to modify an area without a permit can result in a Notice of Violation (NOV), fines, and/or having to restore the facility to its original state.

Once you have determined that an FCP is required for the project, you may fill out and submit an Application to SLCO Flood Control. Permits generally consist of three parts - (1) Application, (2) Plans & Drawings, (3) Reports and Calculations. These can be submitted together or separately. We do recommend submitting the Application portion earlier on in your planning stages, as it is required to open the review and assign a permit number to your project. The plans, drawings, and calculations can be submitted throughout the process as requested.

Often, particularly for larger projects, applicants will involve the FCP Specialist early on in the planning/meeting process, prior to submitting an application, to avoid potential issues down the road. This is not required but may be useful in certain situations.

The review and approval process takes time and is dependent upon many factors. While 3 weeks is average for a complete permit packet, your permit may take longer. Please plan this as part of your timeline. We cannot approve a permit until *all final stamped plans* have been submitted, and work on the project cannot begin until you have received an approved permit. (SLCO FCPs do not guarantee work may begin. Many projects will require additional permits from other agencies. Some examples are - if the project is on a canal, in a Superfund Operable Unit (OU), on the Jordan River Meander Corridor, involves the Surplus Canal/USACE, etc.)

### **Information Needed to Complete the Application**

The [Public Works Interactive Map](#) is very useful when completing the Application.

- 1) **Names & contact information** (including email, phone number, and address) should be provided for up to three people--the Applicant, the Applicant's Representative, and the Consulting Firm. "Applicant" refers to the person or entity that will ultimately be responsible for the continued maintenance of the permitted system or facility. This could be the homeowner, the City, developer, HOA, etc. Representative refers to an "on-site" person, or contact person, that is knowledgeable about the project and can answer any questions or concerns. In some

cases, this will be the same as the Applicant. In others, the Representative may be the contractor, the HOA president, or the company's dedicated permit contact. The Consulting Firm and Consultant refer to the engineering firm and the engineer providing the plans for the project.

## 2) Location information

- a) Name of Flood Control Facility affected. (Ex. Emigration Creek)
- b) Project address and coordinates
- c) Parcel number and subdivision (available on the Recorder's or Assessor's website)
- d) Municipality (Ex. South Jordan City)

## 3) Any other applicable permit numbers or approvals you may have. (Ex. Stream Alteration Permit number and/or approval letter from the affected Canal Company)

## 4) Project Description

- a) Type of construction
- b) Intended use/purpose
- c) Drawings and sketches as required (See Plans & Drawings)

## 5) Signature of Applicant

- a) The applicant must sign indicating acceptance of the permit terms and any special conditions which may be added during the review process.
- b) A maintenance easement will be requested by the County for Flood Control maintenance and emergency purposes. The applicant agrees to show this on a recorded plat or recorded document.

## Plans & Drawings

- 1) In general, all Applicants will electronically provide **ONE** set of plans and profile drawings which include:
  - a) Location of the project site with Flood Control Facility called out
  - b) Cross-section drawings of the affected facility at intervals of 50-100 ft.
  - c) The 100-year flood elevation (BFE) for current & proposed conditions
  - d) Detail drawings, standard drawings, or calls for any prefabricated items
    - i) Structural & hydraulic calculation worksheets as needed. These may include, but are not limited to:
      - (1) Calculations for a retention/detention facility. These must use the 100-year flood event and identify flood flow rates and water surface elevations within the facility.
      - (2) Calculations should be provided for pre-development conditions, post-development conditions, and detention pond sizing.
      - (3) Discharge Calculations - most facilities are at or near their design capacity. As such, all projects requesting to discharge into County Facilities will typically be required to detain storm water to the lesser of either the pre-development flows or 0.2 cfs per acre. ***Some facilities may not accept any discharge, and some cities may have more restrictive requirements which will supersede the County's.***
      - (4) Riprap Sizing calculations. When riprap is required, it should be shown to the center of the channel and be a minimum thickness of  $2 \times D_{50}$ . Sizing calculations must be submitted.
  - e) All final plans must be stamped by a licensed Professional Engineer

## **Process**

- 1) If your project is on the Surplus Canal, contact the Flood Control Specialist *prior* to submitting any documents.
- 2) Submit your application to the County Flood Control Permit Specialist. PDFs of the Application and of the Plans and Drawings are preferred and should be submitted via email, if possible.
- 3) Fees
  - a) Salt Lake County currently has a **No Fee** permit process.
  - b) Canal Companies often charge a separate fee and require a separate agreement. If your project is on a canal, SLCO FC will require the canal company's signature prior to issuing a flood control permit.
- 4) A permit number will be created & the permit specialist will answer any questions or requests for additional information.
  - a) Once the final plans, and all necessary calculations and documents have been received, the Permit Specialist will review the submission. This may involve coordinating with, and getting approvals from, outside agencies - particularly if the project involves a canal or an OU.
  - b) The Permit Specialist will recommend approval or denial of the application, and it will be forwarded to the Operations Field Supervisor for their recommendation. The Operations Field Supervisor may verify that the project and easement will allow for sufficient access to the Facility for maintenance or during an emergency.
  - c) Next, either the Engineering Project Manager or the Associate Division Director will review the plans and make their recommendation before forwarding to the Division Director who is the final approving authority.
- 5) Once approved, the Permit Specialist will email you an approved Flood Control Permit.
  - a) Note-It is unlawful to construct any structure, encroachment, facility, appurtenance, or obstruction without first receiving a permit in accordance with Section 17.08.020 of the Utah Code, or to fail to remove any of the same that are not in compliance with this title when requested to do so by the County.
- 6) Applicant agrees to contact the Permit Specialist no less than *48 hours* prior to beginning the project so that necessary inspections can be carried out.
- 7) It is the responsibility of the Applicant to obtain all other required permits and to schedule all other required inspections with the appropriate jurisdictional agencies.

## **Potential Additional Requirements**

- 1) Geologic Soils Reports
  - a) Required if the project involves the Jordan River Meander Corridor
  - b) Required when geological hazards or site conditions warrant
- 2) Operable Unit Zone (OU)
  - a) If it is determined that the project is in an OU, specific requirements will need to be met depending on which OU and Municipality the project is in. Visit the [Public Works Interactive Map](#) and check "Kennecott OU" to view the OU overlay.
  - b) Requirements for a project within an OU may include notifying the Health Department, Utah Department of Environmental Quality, and the City.
  - c) Soil management and groundwater reports may be required.

- 3) Permits, Licenses, Encroachment Agreements, ROW's, Easements, etc. While these are not required as part of your application, they may help expedite the process if relevant and included.

### **Guidelines & Exceptions**

- 1) SLCO has some minimum requirements for specific types of common projects and has guidelines available upon request for these. Guidelines are available for:
  - a) Subdivisions (If your plat includes a Flood Control Facility, it is required to have a signature block for SLCO Flood Control on the Mylar. Prior to signing the Mylar, SLCO Flood Control will require an approved Flood Control Permit)
  - b) Culverts and Piped Systems (must pass 100-year flow)
  - c) Aerial Crossings
  - d) Directional Bore Crossings
  - e) Outlets to Flood Control Facility
  - f) Open Trench Crossings
  - g) Riprap
- 2) SLCO has a time limit of **5 years** for completing permitted work. If the Applicant requires additional time to complete the authorized activity, they may submit a request for an extension to SLCO Flood Control no less than 30 days prior to the date of expiration.
- 3) No work will be permitted (except directional bores) during spring runoff or during fish spawning seasons on any natural stream or water body.
- 4) Canal companies may not allow work to be completed during irrigation season and may have different standards for work that is allowed during that time. Irrigation season runs from approximately April 1<sup>st</sup>-October 15<sup>th</sup>.
- 5) Exceptions
  - a) Landscape Work
    - i) People performing minor landscape work *may* not need to submit calculation worksheets or engineered drawings *if* the project does not change the existing dimensions, flow, or capacity of the Flood Control Facility.
    - ii) Hand drawn sketches and/or maps with highlighted locations should still be provided.
  - b) If your project involves a canal or stream not listed in 17.08.040, you do not need a Flood Control Permit from Salt Lake County Flood Control.
  - c) If you have questions related to FEMA, contact your City as they are the FEMA Floodplain Administrator.

THE FOLLOWING FACILITIES, WHEREVER LOCATED IN THE COUNTY, INCLUDING OPEN CHANNEL SECTIONS & SECTIONS IN CONDUIT, ARE DECLARED TO BE PART OF THE STORM DRAINAGE AND FLOOD CONTROL SYSTEM & ARE SUBJECT TO THE PROVISIONS RELATING TO SUCH FACILITIES.

	<b>Facility Name</b>	<b>Reaches</b>
1	Jordan River	All
2	City Creek	All, including North Temple Drain
3	Red Butte Creek	Reservoir to Jordan River, includes 1300 South Drain
4	Emigration Creek	All, including 1300 South Drain
5	Parley's Canyon Creek	Mountain Dell Reservoir to Jordan River, includes 1300 South Drain
6	Mountain Dell Canyon Creek	All, excluding Little Dell Reservoir
7	Lamb's Canyon Creek	All
8	Mill Creek	All
9	Neff's Creek	All, east of 2300 East & the "JJ" Drainage system
10	Big Cottonwood Creek	All
11	Little Cottonwood Creek	All
12	Dry Creek	Bell's Canyon Reservoir to Jordan River
13	Big Willow Creek	All
14	Little Willow Creek	All
15	Corner Canyon Creek	All
16	Beef Hollow Creek	Camp Williams to Jordan River
17	Wood Hollow Creek	Camp Williams to Jordan River
18	Rose Creek	All
19	Butterfield Creek	Head Waters to 6000 West

20	Copper Creek	All
21	Midas Creek	All
22	Bingham Creek	Highway 111 to Jordan River
23	Barney's Creek	All
24	Harker's Canyon Creek	All
25	Coon Canyon Creek	All
26	Utah Lake Distributing Canal	All
27	Utah & Salt Lake Canal	All
28	South Jordan Canal	All
29	North Jordan Canal	All reaches, permit required only for discharges
30	Kennecott Canal	All
31	Riter Canal	All
32	Kersey Creek	All
33	C-7 Ditch	All
34	Lee Creek	All
35	8000 West Drain	Utah & Salt Lake Canal to C-7 Ditch
36	Kearns-Chesterfield Drain	Utah & Salt Lake Canal to Jordan River, including Decker Lake
37	Lee Drain	Lee Drain Pump Station to Lee Creek
38	Goggin Drain	Surplus Canal to Great Salt Lake
39	Surplus Canal	All
40	2700 West Drain	North Jordan Canal to I-215 Drain
41	I-215 Drain	4700 South to 4100 South & 2700 West to Decker Lake
42	4100 South Drain	3200 West to Jordan River

43	4700 South Drain	South Jordan Canal to I-215 & North Jordan Canal to Jordan River
44	3200 West Drain	4700 South to 4100 South
45	5400 South Drain	Utah & Salt Lake Canal to Jordan River
46	City Drain, West Branch	CWA-2 Drain to Sewage Canal
47	Sewage Canal	City Drain to Great Salt Lake
48	CWA-2 Drain	CWA-1 Drain to City Drain
49	CWA-3 Drain	Brighton Canal Extension to CWA-2 Drain
50	CWA-1 Drain	Roper Yard to CWA-2 Drain
51	4th Avenue Drain	Virginia Street to City Creek
52	8th South Drain	East High School Detention Basin to Jordan River
53	7200 South Drain	East Jordan Canal to Jordan River
54	9000 South Drain	Sandy Irrigation Canal to Jordan River
55	Salt Lake City Canal	To Red Butte Creek
56	East Jordan Canal	To 7200 South
57	East Jordan Canal Extension	7200 South to Walker Lane
58	2700 South Storm Drain	Nibley Park to Mill Creek

## USEFUL RESOURCES

### SALT LAKE COUNTY FLOOD CONTROL PERMIT REVIEW SPECIALIST

Aaron Murphy – [AMurphy@saltlakecounty.gov](mailto:AMurphy@saltlakecounty.gov) or 385-468-6626

### TYPICAL SECTIONS & MINIMUM REQUIREMENTS EXAMPLES

*Available from SLCO Flood Control*

### SALT LAKE COUNTY FLOOD CONTROL PERMIT

<https://www.saltlakecounty.gov/flood-control/permits/>

### PUBLIC WORKS INTERACTIVE MAP

<https://experience.arcgis.com/experience/75f7fc1d260643cea5ccf5d489caef20>

### SALT LAKE COUNTY CODES-TITLE 17

[https://library.municode.com/ut/salt\\_lake\\_county/codes/code\\_of\\_ordinances?nodeId=TIT17FLCOWAQU\\_CH17.08FLCOFA](https://library.municode.com/ut/salt_lake_county/codes/code_of_ordinances?nodeId=TIT17FLCOWAQU_CH17.08FLCOFA)

### UTAH STATE CODE-TITLE 17

<https://le.utah.gov/xcode/Title17/Chapter8/17-8.html>

### FEMA FLOOD MAP SERVICE CENTER

<https://msc.fema.gov/portal/home>

### UTAH DIVISION OF WATER RIGHTS-STREAM ALTERATION

<https://www.waterrights.utah.gov/strmalt/default.asp>

### US ARMY CORPS OF ENGINEERS

<https://www.usace.army.mil/>

### US ARMY CORPS OF ENGINEERS SECTION 408 PROGRAM

<https://www.usace.army.mil/Missions/Civil-Works/Section408/>

### US ARMY CORPS OF ENGINEERS CATERGORICAL PERMISSIONS

<https://www.spk.usace.army.mil/Missions/Civil-Works/Section-408-Permissions/Categorical-Permission/>