

## **Project Title: Winooski River Flood Mitigation – Pioneer Dam & Jacob Davis Homestead- 5 Home Farm Way**

### **Project Location:**

Montpelier, Vermont — spanning two adjacent areas:

1. Pioneer Dam Area: Upstream of the Pioneer Street bridge to the Route 2 bridge at Gallison Hill Road
2. Jacob Davis Homestead-5 Home Farm Way: 18-acre property at the confluence of the Winooski and Stevens Branch Rivers

### **Problem Being Addressed:**

Recurring flooding and sediment/debris buildup at the confluence of the Winooski and Stevens Branch Rivers, specifically affecting the Route 302/Route 2 intersection and adjacent infrastructure. This impedes emergency access and increases long-term flood risk.

### **Project Goal:**

To improve flood resilience in the Montpelier region by removing Pioneer Dam and reconnecting the floodplain at Home Farm Way, allowing floodwaters to move more freely, sediment to be deposited in controlled areas, and reducing peak flood depths in critical infrastructure corridors.

### **Project Tasks**

#### **1. Subgrant Agreement**

Contracting process between the State and Subapplicant following project approval.

#### **2. Pre-Construction**

- Permitting
- BCA Refinements
- Environmental and Historic Review

Funded Separately

Surveys, engineering, and design finalization.

#### **3. Construction**

- Procurement:
  - Construction management for both Pioneer Dam and Home Farm Way components.
- Demolition & Site Preparation:

- Traffic control for both areas
- Staging site setup (both locations)
- Sediment controls
- River access setup (Pioneer)
- Dam area traffic and staging coordination
- Dam demolition and removal (Pioneer)
- In-stream access roads and removals (Pioneer)
- Sediment removal staging and tree removal (Home Farm Way)
- Invasive plant removal (Home Farm Way)
- Construction Activities:
  - Earthwork and regrading at Home Farm Way (~24,000 CY)
  - Sediment removal from River Station 82+00 to 100+00 (~25,500 CY)
  - Removal of dam structure and ballast (~740 CY)
  - Riverbank armoring at both sites
  - Addition of woody material to riverbank (Home Farm Way)

#### 4. Site Restoration

- Seeding with native plants
- Tree planting and replanting
- Shrubbery restoration
- Final inspection and stabilization of disturbed areas

#### Construction Specifications:

- Design Flood Level: 100-year flood
- Floodplain Area (Home Farm Way): 12.8 acres
- Depth Range: 0'–6'
- Volume of Material Removed (Total): ~50,240 CY
- Flood Height Reduction: Estimated 0.1' drop during 100-year event in affected area

#### 5. Post-Construction

- Project management
- As Built Plan
- Final Oversight Report
- O&M memorandum
- Letter of Map Revision
- Legal Services
- Permit closeout
- Photo documentation

## **6. Grant Closeout**

Final financial reconciliation

Required reporting and compliance confirmation.