

Projects Committee Meeting
Thursday, April 2, 2020 8:00 AM
Lower Platte North NRD Office
P.O. Box 126
Wahoo, NE 68066

1. UNFINISHED BUSINESS

No unfinished business to address.

2. Lower Platte North NRD Dealing with COVID-19

Several weeks ago management and staff began planning for altered office procedures due to the growing concern over COVID-19. The following is a listing of some of the changes that have been made over the past several weeks:

- Office staff has been divided into two work groups, each working 3 days in the office and 3 days remotely from home.
- Staff members who can continue to work outside will do so when work is needed however they will not be permitted to enter any portion of the office.
- While working from home, staff will be available for phone and e-mail communications and understand all job related responsibilities remain.
- Management and staff are conducting daily conference calls at 10 am and 2 pm to maintain aggressive communication lines and insure all staff is up to date with ongoing District workloads.
- Sick leave will not be utilized while staff is working from home.
- The office doors have been locked and the general public is not allowed into the building without an appointment.
- If a walk-up customer needs to drop off paperwork, payment or any other correspondence, staff will go to their vehicle and take care of business outside of the office.
- All staff is being asked to follow generally accepted CDC recommendations when it comes to washing hands, disinfecting equipment and operating as safely as possible in our current working environment.
- Office cleaning crew is disinfecting all solid surfaces, light switches, door handles and public spaces during their regular cleaning and staff is doing the same at the end of the 3 day shifts.
- All staff will remain home and not come into the office if they have any of the variety of COVID-19 symptoms.
- Our NRD recreation areas remain open however we have closed down the Wanhoo playgrounds and all of our recreation site toilets.
- While we can never guarantee the absolute safety to all our employees, we believe these steps and any future steps, will help us achieve our greatest goal, that of protecting the health and well-being of our staff and the general public.

3. SWCP

Nebraska DNR contacted the NRD on 3/13 to inform us of returned NSWCP funds for the fiscal year. The funds were re-distributed evenly, we have been allocated an additional \$3,475.23 for FY20.

Attached is our amended SWCP policy for approval.

A. SWCP Application Approvals

Below are three eligible applications for the LPNNRD's Summer SWCP program. All three are outside of the established "high priority areas", therefore the maximum allowed cost-share per SWCP Policy is \$10,000.00.

20-S-2 Rick Beranek: SEC 25-13-8: Terrace w/ TO, Grass Waterway \$10,000.00

20-S-3 Randy Beranek: SEC. 31-13-9: Terrace w/ TO. \$10,000.00

20-S-4 Dennis Beranek: SEC 35-13-8: Terrace w/ TO. \$10,000.00

B. SWCP Payments

None.

C. SWCP Cancellations

None.

D. Wahoo Creek Cost Share Approvals

None.

4. WATERSHEDS

A. Shell Creek

No new information.

1. Shell Creek Environmental Enhancement Plan Implementation

No new information.

a. Shell Creek Grant Funding Update

No new information.

B. Wahoo Creek Watershed

1. Wahoo Creek Dam Site Planning Update & FYRA Invoices

FYRA submitted our Watershed Plan to NRCS in January and is currently under review.

Attached is FYRA's March 28, 2020, invoice for payment. After this \$5,104.34 payment, a maximum of \$20,679.77 will remain under contract.

2. Olsson Design Update and Invoice

Attached is Olsson invoice (and progress report) totaling \$7,781.14 for work on Wahoo Creek Dam Sites 26a, 26b & 27. After this payment, \$207,627.70 will have been spent, leaving \$376,197.30 of the total \$583,825 from this section of our contract.

Olsson plans to visit sites 26a, 26b and 27 on April 13 - 17, to complete some environmental assessments at those locations. We will send out letters to landowners notifying them of these field visits.

As approved by the Board, Poole and Mountford have completed an WFPO application for federal construction and construction observation funds (\$4,152,700 million) for Wahoo Creek dam sites 77 & 84 (attachments). Not including our administration costs, LPNNRD's needed contribution for sites 77 & 84 is estimated at \$2,928,000. The attached draft application was sent to NRCS on March 31st for further review and edits. Attached is a copy of Allen Gerhing email on applying for additional funding this year. Since NRCS in Little Rock, AK, has questions on how the economics was calculated, Allen is suggesting we hold off with our application at this time. He may have more information the week of April 6th.

3. Wahoo Creek Watershed Water Quality Plan Phase II

a. Lands for Conservation Applications

Below is an application for our Wahoo Creek Watershed Lands for Conservation program. As a reminder, the approved 2020 LFC payment rate is \$198.00/acre.

Gregg Fujan - 10 acres - \$1980.00

Steve Vasa - 16 acres - \$3,168.00

Dorothy Peterson - 38 acres - \$7,524.00

Totals - 64 acres - \$12,672.00

4. Wahoo Creek Overlay Districts

Weston approved their Dam Breach Overlay District on March 2, 2020. We now have all three Dam Breach Overlay Districts approved by Saunders County, City of Wahoo and Weston as needed for the Wahoo Creek Watershed Plan.

Attached is JEO's March 12, 2020, \$1,491.25 invoice for contract work completed for the Wahoo and Weston Dam Breach Overlay Districts. There is

\$873.75 unused from our \$5,200 contract.

5. JOINT WATER MANAGEMENT ADVISORY BOARD

No new information was presented.

6. HAZARD MITIGATION PLAN (HMP) UPDATE

On March 27, Elliott and Mountford had a teleconference with JEO personnel who explained the Flood Risk Assessment work that has been completed for Fremont and Schuyler.

We also discussed and gave input to our LPNNRD HMP Worksheet and District Profile. The draft plan will go out for a 30 day public review and obtain approval from each participant before being submitted to FEMA/NEMA. Once the draft is received from JEO, our portion of the plan will be forwarded to all Directors for review. Attached is an adoption resolution for review. The draft plan can be reviewed at : <https://jeo.com/lpnnrd-hmp>.

A potential Board motion to accept the draft plan and authorize the Board Chairman to sign the attached Lower Platte North NRD HMP adoption resolution can occur at the April 13, 2020 Board Meeting. If the Board desires more time to review the plan, it can be delayed until the May 11 Board Meeting.

Attached is JEO's March 26, 2020, invoice totting \$31,098.08 for contract work completed on our Hazard Mitigation Plan update. This work is 75% reimbursable by FEMA/NEMA and Fremont and Schuyler will reimburse us 25% for flood risk assessment portions completed (drafts attached) in each of their communities. After this payment, \$28,928.52 will remain in the contract for Board authorized work. To date, the Board has authorized \$228,000 under the total \$250,000 contract with JEO.

7. EROSION AND SEDIMENT RULES AND REGULATIONS

No new updates.

8. OTHER

9. ADJOURNMENT

The Projects Committee Adjourned at 8:42 a.m.

SWCP Monthly Report

April 2, 2020

SWCP LOCAL	\$50,000.00
SWCP TREE ALLOCATION	\$3,000.00
STATE ALLOCATION	\$87,074.48
CASH CARRY-OVER	\$0.00
AMOUNT SPENT	\$57,702.75
CASH BALANCE	\$79,371.73
ALLOCATION %	147%

APPROVED SMALL DAM PROJECTS:

SWCP #	STATUS	NAME	AMOUNT	PROJECT	SHELL CREEK FUND
15-S-12	Approved	Mike Chvatal	\$ 32,297.00	Small Dam	

APPROVED SUMMER PROJECTS:

19-S-1	JALA LLC	\$ 10,000.00	TOT
19-S-2	DENNIS BERANEK	\$ 10,000.00	TOT
19-S-3	ROGER FUJAN	\$ 12,500.00	TOT
19-S-4	HARTMAN FAMILY TRUST	\$ 12,500.00	TOT
19-B-1	GARY MEISTER	\$ 12,500.00	TOT
19-B-2	CLINTON VANDENBURG	\$ 12,500.00	TOT

TOTAL SUMMER APPROVALS \$ 57,500.00

APPROVED FALL PROJECTS:

19-B-1	MARCELLA DIVIS	\$ 12,500.00	TOT
19-B-2	WILLIAM KOZISEK	\$ 12,500.00	TOT
19-B-3	RICHARD VOBORIL	\$ 12,500.00	TOT
19-B-4	MARIE ROH	\$ 12,500.00	TOT
19-B-5	DWAYNE LANC	\$ 12,500.00	TOT
19-S-1	KENNETH & KATHRYN GOVAERTS	\$ 12,500.00	TOT
19-S-2	LOUIS & DARLENE KAVAN	\$ 12,500.00	GWW
19-S-3	JAMES VANEK	\$ 12,500.00	TOT/GWW
19-S-4	RONALD & MARJORIE SLEGL	\$ 12,500.00	TOT
19-S-5	HARTMAN FAMILY TRUST	\$ 12,006.90	TOT
19-S-6	SHANAHAN FAMILY TRUST	\$ 12,102.18	TOT
19-S-7	PAMELA GOUDIE	\$ 12,500.00	TOT

TOTAL FALL APPROVALS \$ 149,109.08

TOTAL FY20 SWCP APPROVAL \$ 206,609.08

PAID PROJECTS

SWCP #	STATUS	NAME	AMOUNT	PROJECT
	PAID	GARY MEISTER	\$ 9,820.64	WASCB TO
	PAID	CHAD HANSEN	\$ 1,038.56	WINDBREAK - TREE
19-S-1	PAID	JALA LLC	\$ 10,000.00	TOT
19-B-2	PAID	CLINTON VANDENBURG	\$ 10,511.41	WASCB TO
19-S-2	PAID	DENNIS BERANEK	\$ 8,440.32	TOT
19-S-3	PAID	ROGER FUJAN	\$ 6,726.66	TOT
	PAID	KENNETH & KATHRYN GOVAERTS	\$ 11,165.16	TOT

LANDS FOR CONSERVATION (GRANT FUNDED)

Name	Acres	Amount
DARRELL KUBIK	19	\$ 3,610.00
ZACH KASTL	24	\$ 4,560.00
TYLER OSMERA	32	\$ 6,080.00
ROGER FUJAN	30	\$ 5,700.00
GREGG FUJAN	9	\$ 1,710.00
GEORGE CEJKA	30	\$ 5,700.00
RAYMOND URBAN	6	\$ 1,140.00
LEON VERMELINE	10	\$ 1,900.00
GARY PROCHASKA	70	\$ 13,860.00

Total SWCP PAID: \$ 57,702.75

TOTALS 147 \$ 28,490.00

**Lower Platte North
Natural Resources District**

**Soil & Water Conservation Program
(SWCP)**

LPNNRD Board Approval 4/13/20

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LOWER PLATTE NORTH NATURAL RESOURCES DISTRICT POLICY 2018 SOIL & WATER CONSERVATION PROGRAM (SWCP)

I. PURPOSE

The purpose of this program is to provide guidance for administering federal (EPA 319 grants), state (NSWCP, Environmental Trust grants) and local cost-share assistance as an incentive to landowners for the construction and application of soil and water conservation practices.

II. ELIGIBILITY, DISTRIBUTION OF FUNDS

- A. Any landowner within the Lower Platte North NRD (LPNNRD), individual, partnership, corporation or other legal entity is eligible to apply for SWCP funds.
- B. Cost-share program funds will be approved and distributed based on the number of high priority applications received each fiscal year (July 1 - June 30).
- C. Funds may be reserved and targeted toward high priority watersheds and projects as determined and approved by the LPNNRD Projects Committee and Board.
- D. Unobligated or unused SWCP funds in priority watersheds may be redistributed to other areas if not used in a timely manner.
- E. The LPNNRD may supplement the Nebraska Soil and Water Conservation Program (NSWCP) state funds with available federal, other state & local funds. The amount of local funds budgeted and available will be decided each year.
- F. Landowners will be expected to apply for available federal EQIP cost-share funding when applicable and available for eligible high priority practices A, C through M, before state and local cost share funding is approved. It is also generally expected to approve available state funding before local funds are considered.
- G. Lands for Conservation (LFC) program is exempt from the payment cap stipulations of the SWCP policy.

III. APPLICATION REQUIREMENTS

- A. Eligible SWCP applicants are to apply at their local NRCS Service Office (also the LPNNRD office if for tree planting or windbreak renovations). Applications with appropriate NRCS comments/recommendations are to be forwarded to the NRD for consideration.
- B. Applications will contain sufficient information to include:
 - 1. Date construction (summer or fall) is expected to be completed.
 - 2. Type of Project to be installed.
 - 3. Whether the proposed project is located in a priority watershed area or if other special conditions exist.
 - 4. An aerial photograph showing the project location.
 - 5. Total estimated cost-share needed for the project.
 - 6. When applying for a small dam or grade stabilization structure, the estimated percent of land treatment draining to the proposed site (Attachment C).

IV. ELIGIBLE HIGH PRIORITY PRACTICES

- A. **Establishment of warm and cool season grass on crop land**
- B. **Small conservation project (terraces, basins, diversion, grass waterways and/or underground outlets) applications.** This priority practice includes newly established

grass waterways and/or replacement grass waterways.

- i. Small projects are only eligible on fields where a complete no-till cropping management system is currently being applied.
- ii. Existing grassed waterway applications must be over 10-years old and part of an approved terrace system or on 100% no-tilled fields)
- iii. Small Projects may involve the construction of a new terrace and/or sediment & water control basins systems or it may include the extension of an existing terrace system with the inclusion of sediment & water control basins (this priority does “NOT” include the replacement of functionally obsolete terrace systems, waterways and sediment & water control basins in excess of 10-years old).
- iv. Small projects do not include practice of installing tile outlets into existing functional terrace outlet systems (refer to priority G).
- v. Small projects will not exceed \$5000.00 in cost incentive request.
*For small projects, landowners will not be expected to apply for available federal EQIP cost-share funding for eligible high priority practice B. It will generally be expected to approve available state funding before local funds are considered.

- C. *Construction of new terrace systems** (includes replacement of functionally obsolete terrace systems in excess of 20-years old).
- D. Construction of sediment & water control basins when part of a new terrace system where cost share incentives exceeds \$5,000** (Attachment A).
- E. Construction of Diversions when part of a new terrace system or dam** (Attachments A & C).
- F. Planned Grazing Management Systems** (Attachment B)
- G. * Installation of Tiled Outlets into Existing Terraces** (includes the storage portion of the terrace).
- H. Water Impoundment and Grade Stabilization Structures** (Attachment C)
- I. Tree/Shrub Planting** (Only when NRD stock is provided and planted by the District)
For riparian buffer strips, field, acreage and farmstead windbreaks and for wildlife habitat 200- tree/shrub minimum is required for riparian buffer strips, and for field and farmstead windbreaks. A 300-tree/shrub minimum is required for wildlife habitat.
- J. Windbreak Renovation** (Attachment D)
- K. Supplementing EQIP Contracts in Priority Areas**
When federal EQIP funds are approved in LPNNRD priority areas, the District may approve additional local and/or state cost share not to exceed the established maximum cost share percentage approved for a practice or the specific area.
- L. Emergency Repair of Conservation Practices** (Attachment E)

***NOTE:** Cost share only applies toward the tile outlet portion of approved terrace systems to establish a stable outlet. A stable outlet is considered to be on land that has a 2% grade or less. A landowner may choose to install a portion of the outlet without cost share assistance provided that it meets NRCS design standards and specifications.

V. INELIGIBLE PRACTICES

- A. Any application that would allow the installation of terraces on land that has established

- grass will not be approved.
- B. The LPNNRD will not approve any conservation practice that will encourage the conversion of grassland, including CRP land, to crop land. This includes CRP land in the last year of the contract.
 - C. Rebuilding grassed waterways or tile outlets if under 10-years old. Note: Cost share for replacing grass waterways will be considered on a case-by-case basis when over ten (10) years old and part of an approved terrace system or on 100% no-till fields (see IV. M.).
 - D. Work that is considered normal maintenance of existing conservation practices.
 - E. Rebuilding terraces on existing terrace lines.
 - F. Terraces systems on Class VI land or greater.
 - G. Sediment removal from small dams or other impoundments and/or from adjacent lands of said structures.
 - H. Work started or constructed prior to approval.
 - I. Livestock Waste Pits.
 - J. The District will not provide cost share for practices on farmland that does not have a certified Nitrogen operator or on irrigated land where the irrigated acres are not certified by LPNNRD.
 - K. Any practice on fields that are determined sod-busted by the NRCS.
 - L. Repair of damage to conservation practices that is determined to be landowner negligence in performing normal maintenance as outlined in NRCS specifications.

VI. APPLICATION SUBMITTAL, APPROVAL & PROJECT COMPLETION PERIODS

A. Summer Construction Applications (For June through September 15):

To insure LPNNRD consideration, **applications for summer construction must be submitted by February 1.** Most generally, the Projects Committee will review, rank and recommend summer application approvals at the **February/March Projects Committee Meeting.** However, consideration and approval of summer applications received after **February 1** may occur depending on available funds. All **summer construction projects are to be completed by September 15 and final paperwork submitted to the LPNNRD office by October 15.** The Projects Committee will review all uncompleted or unpaid applications at the end of each period to determine if application extensions and/or cancellations are warranted. **The field must be available for construction by August 1. The area must be planted to a cover crop or a crop preceding or after construction. The crop or cover may be harvested or pastured during the contract period.** Work not **completed by September 15,** may be canceled or receive reduced cost share as determined by the **Projects Committee/Board.**

NOTE: Cooperators who are approved for incentive payments within special designated watersheds, must follow these same summer construction requirements (refer to the “Lands for Conservation Program” – Attachment F).

B. Fall Construction Applications (September through December project completion):

To insure LPNNRD consideration, applications for fall construction must be received by **July 1.** Most generally, the Projects Committee will review, rank and recommend fall construction application approvals at the **July/August Projects Meeting.** However, additional approvals for fall work may occur after July/August as funds are available.

Approved fall applications will be given until December 31 to complete the work. The Committee will review all unpaid applications at the end of each year to determine application extensions and cancellations.

C. Grass, Tree Planting, Windbreak Renovation Applications:

Application periods for grass establishment will be approved based on NRCS seed and seeding specifications. Applications for trees are generally considered for approval just before the spring planting season. For approved Windbreak Renovation applications, tree removal will normally be completed in the summer or fall so the site will be ready before spring tree planting.

D. Small Dam Application (Attachment C):

To ensure consideration for approval, the **District will need NRCS/NRD technician recommended applications by December 15.** The Projects Committee will review and prioritize and submit a recommendation for approval at the January Board Meeting.

E. LPNNRD Signatures on Approved Applications & Related Documents:

The Manager, Assistant Manager and Projects Coordinator are authorized to sign Board approved SWCP applications, Completion and Document Certifications and other related documents on behalf of the LPNNRD.

VII. 2020 PRIORITY AREAS & ELIGIBLE COST-SHARE PERCENTAGES

Priority areas for 2020 listed below are given first consideration for District cost share assistance. Each year, high priority practice applications located in priority areas are reviewed and approved by the Projects Committee and Board for the upcoming program year. The cost-share assistance payment may not exceed a total of the eligible percent for an area when combining all sources of federal, state and local assistance. If there is not enough funding for all applications for all listed priority areas, the Projects Committee may rank areas for approval or approve a lower maximum cost share percent.

LPNNRD Cost-Share Amounts	Average (%) and Actual
FALL Work (District Wide) max \$ limit: \$12,500.00	75
FALL Work (Targeted Areas) max \$ limit: \$12,500.00	75
SUMMER Work (District Wide) max \$ limit: \$10,000.00	75
SUMMER Work (Targeted Areas) max \$ limit: \$12,500.00	75

Targeted Areas	Notes
A. LPNNRD Lands North of the Platte River	Platte, Boone, Madison, Colfax & Dodge Counties. Shell Creek is also in ET & EPA 319 grant area - actual percent depends on priority area and practice as defined in approved grant application).
B. Lake Wanhoo (Sand/Duck Creek) Watershed	
C. Czechland Lake Recreation Area Watershed	
D. Homestead Lake Recreation Area Watershed	
E. Wahoo Creek Sub-Basins	Dunlap Creek; North Fork Wahoo Creek; Miller Branch Creek. These Wahoo Creek Sub-Basins are designated EQIP NWQI, EPA 319 and Environmental Trust Priority Areas.
F. Skull Creek Watershed	It is anticipated to alternate this watershed with the Bone Creek Watershed every two years
G. Watersheds Above All Existing and Planned LPNNRD Flood Control Structures	Non-public structures that are or will be LPNNRD Flood Control Structures operated and maintained by the District
H. Watersheds Above Proposed or Completed Landowner SWCP Cost Share Dams	That will or have received LPNNRD assistance
I. Voluntary Compliance of Verified Erosion & Sediment Complaints	District-wide
J. All High Priority Practice Summer Applications	District-wide (June 1 through September 15 completion)
K. Tree/Shrub Planting	District-wide
L. Voluntary Compliance of Verified Erosion & Sediment Complaints	District-wide
M. All High Priority Practice Summer Applications	District-wide (June 1 through September 15 completion)
N. Tree/Shrub Planting	District-wide

VIII. COST SHARE PERCENTAGE - PRACTICE EXCEPTIONS

The maximum cost share percentage for most high priority conservation practices will be 75%; depending on the where the practice is located (**Refer to VII. above**). The exception to this is for the following high priority practices:

- A. **Water Impoundment Dams and Grade Stabilization Structures: 65% - 75%**
(Attachment C)
- B. **Windbreak Renovation Practice: 50%** (Attachment D)
- C. **Emergency Repair of Conservation Practices: 50%** (Attachment E)

IX. MAXIMUM COST SHARE LIMITS

A. **General Maximum Limit:**

A cooperator may receive up to \$12,500 SWCP funds within any program year (July 1 - June 30) for most high priority practices unless otherwise specified below.

B. **Priority Areas with Federal or State Grant Funding:**

Within priority areas (**Wahoo Creek and Shell Creek e.g.**) that are receiving reimbursable federal or state grant funding, the maximum limits may be exceeded to expedite use of those special funds within the specified grant period time line.

C. **Planned Grazing Systems – Livestock Well Pumping Plants:**

The maximum limit for planned grazing systems is \$12,500, however a maximum cost share limit of \$5,000 will also apply toward the livestock well and well pumping plant components (combined) when part of the approved system (Attachment B).

D. **Water Impoundment & Grade Stabilization Structures:**

The maximum limit for water impoundment dams and grade stabilization structures is \$15,000 upon NRCS recommendation and Projects Committee/Board approval on a case-by-case basis (Attachment C).

E. **Windbreak Renovation:**

The maximum limit for windbreak renovation is \$1,000 per landowner per year (Attachment D).

F. **Emergency Repair of Conservation Practices:**

The maximum limit for emergency repair of conservation practices is \$1,000 per landowner per year (Attachment E).

G. **2020 Summer Conservation Practices in Non-Priority Areas:**

For 2020, the maximum limit for approved conservation practices in non-priority areas will be \$10,000 per landowner per year.

X. AMENDMENTS FOR ADDITIONAL COST SHARE

When applications are approved under the maximum limit, additional funds, up to the limit, may be approved if notified by the landowner or technician before construction. LPNNRD staff is authorized to approve an additional \$1,000 above the original approval (up to the maximum limit) if the request is received from the landowner and/or technician prior to construction. Staff will notify the Projects Committee of any staff authorized changes.

XI. APPLICATION EXTENSIONS

Extensions may be granted for inclement weather or for other conditions beyond the landowner's control. All extension requests will be considered by the Projects Committee and Board on a case-by-case basis. No more than one 6-month extension can be approved for the same application.

XII. CONSERVATION PRACTICE DESIGN, STAKING & PERMITS

- A. All conservation measures must be designed and staked by Natural Resources Conservation Service personnel (NRCS), NRD technicians or other NRCS approved technical service providers. All completed conservation work must be according to the NRCS design standards and specifications as outlined in the NRCS Procedures Handbook for LPNNRD.
- B. The landowner is responsible for contacting the NRCS office to secure funds and schedule the layout (design and staking) of the approved work
- C. The landowner is responsible for obtaining all required local, state and federal permits.

XIII. SUBMITTING BILLS & PAPERWORK ON COMPLETED WORK

- A. The landowner is responsible for submitting all bills to the NRCS office. The NRCS will calculate the eligible cost share payment (on NSWCP form # 3) and submit completed and properly signed paperwork to the LPNNRD.
- B. Drawings of the completed practices at to be provided by the NRCS/NRD technician on an aerial photo and submitted with the payment request.

XIV. COST SHARE PAYMENTS

- A. LPNNRD has approved use of NeDNR's 2020 conservation practice payment rates for calculating SWCP contract cost-share payments. Payments will be based on NeDNR's conservation practice payment rates that were in force at the time the application was approved. The cost-share percent may be lowered if summer work is extended into fall.
- B. The LPNNRD calculates and pays cost-share on terraces only by the linear foot, not by the cubic yard.
- C. The cost-share percentages are calculated by multiplying the eligible cost share percentage by the approved cost share practice payment schedule rate or actual cost whichever is less. The cost-share assistance payment may not exceed a total of the eligible percent for an area when combining all sources of federal, state and local assistance.
- D. **Splitting Cost-Share Percentages:** When a field splits two cost-share priority areas, the corresponding eligible cost share percentage will be applied to each portion of the field being treated. When a field splits into a non-priority area, that area will be allowed up to 50% cost share assistance, if the non-priority area is 50% or less of the entire field being treated.
- E. **When grant funds are available special conditions aligned with terms of grants will be implemented; in some cases a higher payment percentage rate, or payment cap may be allowed.**

XV. PAYMENT OVERRUNS AND LANDOWNER REQUESTED REFUNDS

A. **Payment Overruns:**

Overruns of up to 10 % above the approved project amount may be approved by staff. Overruns above 10% will need Board approval. Payments are not to exceed the maximum cost share limits set for the various practices. Exception to this is when payments are combined with grant funds in priority areas.

B. **Landowner Refunds:**

If an SWCP practice is purposely damaged, removed or destroyed within ten years after completion (25 years for a small dam), the cooperator who received cost share, will be requested to reimburse the District, all or a portion of the SWCP cost share funds, as determined by the Projects Completion (25 years for a small dam), the cooperator who received cost share will be required to reimburse the District all or a prorated portion of the funding assistance, as determined by the Projects Committee and Board.

SWCP ATTACHMENT A
SEDIMENT & WATER CONTROL BASINS AND DIVERSIONS

This attachment is to help clarify the use of sediment & water control basins and diversions as an eligible cost-share practice. Basins and diversions are to be used as a part of an approved conservation system according to the NRCS technical guides and field manual.

- A. Sediment & water control basins and diversions may be approved as a high priority practice when in conjunction with terraces or dams.

- B. Basins and diversions will be considered a high priority practice when a part of a terrace system or in conjunction with a 100% no-till system. A 100% no-till system must have the goal of controlling soil erosion to soil replacement levels (“T”). A 100% no-till system is accepted land treatment when ephemeral and gully erosion is controlled or “T” is met. Basins and/or diversions built separately on a terraced field are not considered a part of the terrace system.

- C. Basins and diversions not part of a terrace system may be considered as a high priority practice on fields where the NRCS or NRD technician determines terraces are not feasible and/or they offer the most practical solution to a problem. This will be determined by the Projects Committee on a case-by-case basis.

LOWER PLATTE NORTH NRDSWCP ATTACHMENT B PLANNED GRAZING SYSTEM PRACTICE

I. GENERAL REQUIREMENTS

- A. An applicant must have at least 40 acres of connecting grassland to be developed into at least two grazing cells with planned rest periods in accordance with Natural Resources Conservation Service (NRCS) recommendations.
- B. Applicants must complete a minimum 10-year planned grazing system developed by the NRCS prior to submitting an application.
- C. Applicants are required to sign a 10-year cost-share agreement with the LPNNRD. (Form NSWCP-10)
- D. All approved cost-share items must meet NRCS Standards and Specifications.
- E. Funds for approved practices may be used on CRP lands if such lands are in the last year of the CRP contract.
- F. The amount and type of eligible practices approved for each application will be determined by the overall grazing system plan and the most cost effective alternative available.
- G. Cost-share on eligible practices will be based on the approved cost-share percentage times the approved practice payment schedule cost share rate or 75 percent of the actual cost, whichever is less.

II. ELIGIBLE PRACTICES

- A. **Cross Fencing:** Only fencing designed to facilitate cell division is eligible for cost-share (Standard 382 specifications). Boundary fences are not eligible for cost-share.
- B. **Livestock Water Dugouts:** Dugouts will be sized by daily animal needs and Nebraska Engineering Handbook Standards.
- C. **Livestock Well Installation:** Livestock wells will be sized to provide a maximum of 15 gallons of water per animal-unit per day within each cell. No cost-share will be available for domestic or irrigation wells. Well test holes are not eligible for cost-share.
- D. **Pumping Plants for Livestock Wells** (As outlined by State NSWCP Guidelines): While a cooperator may receive up to \$12,500 SWCP funds toward completing a Planned Grazing System, a maximum cost share limit of \$5,000 will apply toward the livestock well and well pumping plant component (combined) if part of the approved system.
- E. **Livestock Water Tanks:** Tanks sized according to standard storage requirements in the NRCS Technical Guide, Standard 614, are eligible.
- F. **Livestock Water Pipeline Installation**

**LOWER PLATTE NORTH NRD
SWCP ATTACHMENT C
GUIDELINES FOR WATER IMPOUNDMENT (SMALL DAMS) &
GRADE STABILIZATION STRUCTURES**

I. PURPOSE

The purpose of this program is to assist landowners with the construction of water impoundment and grade stabilization structures on their property.

II. ELIGIBLE PROJECT ITEMS

A. Eligible Project Costs Include:

1. Construction (Not to include site preparation)
2. Seeding (Structure and emergency spillway)
3. Fencing when required by the NRCS

III. LAND TREATMENT REQUIREMENT

To be eligible for cost-share assistance, a minimum of 75% land treatment is required within the watershed above each proposed structure site. To calculate this percentage, non-highly erodible land is considered treated.

Land Treatment Definition:

Land treatment is defined as any practice or combination of practices (i.e. terraces, no-till etc.), that control soil erosion rates on highly erodible soils to soil replacement levels or less (Soil replacement level or "T" = 5 tons/acre in the LPNNRD). Any approved NRCS farm plan that treats land to "T" qualifies under this definition (8/2/00 Projects Committee).

IV. COST-SHARE PERCENTAGE AND MAXIMUM ASSISTANCE

The cost-share percent for approved applications outside selected priority areas is up to a maximum of 65%. For small dams approved within selected LPNNRD priority areas, the cost-share rate is up to a maximum of 75%. Eligible assistance will be based on the eligible cost-share percent times the county average costs or 75% of actual costs whichever is less. The maximum cost-share limit will be \$15,000 upon NRCS recommendation and Projects Committee approval on a case-by-case basis (see Special conditions below).

Special conditions: The Board may approve a higher cost-share percentage and increase the maximum assistance if an application site is above an LPNNRD recreation area, within a targeted watershed or when other special conditions exist. The Board may also approve a lower cost-share percent and decrease the maximum assistance for structure sites of lower priority. **Special** conditions will be evaluated by the Board on a case-by-case basis.

V. PRIORITY AREAS

Priority-areas for small dams and grade stabilization structures include the following watersheds:

- A. Sand & Duck Creek
- B. Wahoo Creek

- C. Skull Creek
- D. Shell Creek
- E. Bone Creek
- F. Watersheds above Pubic Recreation Structures (e.g. Czechland Lake, Homestead Lake, Lake Wanahoo)
- G. Above all existing LPNNRD Operated and Maintained Watershed Structures.

VI. APPLICATION ELIGIBILITY AND SIGN-UP

- A. Any landowner within the Lower Platte North NRD who is an individual, a partnership, a corporation or other legal entity.
- B. Applications may be submitted any time during the year; however, only NRCS inspected and recommended applications received by December 15, will ensure consideration for the following construction year. Unapproved applications will expire on May 1 of each year, requiring a new landowner application for future consideration. The Projects Committee will review, prioritize and submit a recommendation for approval at the January Board Meeting.
- C. The applicant shall apply at the county NRCS office on forms provided by the LPNNRD. An aerial photo showing the proposed project location must accompany the application. The application must be signed by the applicant and sent to the LPNNRD before December 15 of each year to insure consideration for the immediate year's construction.
- D. At the time of application, the NRCS will be requested to provide an estimate of drainage acres, percentage of land treatment present, quantities and costs for the project.

VII. APPLICATION EVALUATION AND TENTATIVE APPROVAL

- A. Application sites will be inspected by LPNNRD and NRCS representatives to evaluate feasibility, benefits and cost. Benefits to be evaluated will include but not be limited to: flood control, grade control, erosion and sediment control, wildlife habitat enhancement, livestock water, and protection to public roads and property.
- B. The Projects Committee will most generally review, prioritize, and make recommendations on applications at their January meeting.
- C. The NRD Board of Directors will generally approve, reject, or table each request at the January Board Meeting.
- D. After receiving LPNNRD approval, the applicant will be required to submit a \$500 deposit to the NRD before a survey or design is started. The deposit will be returned to the applicant after project completion. If the deposit is not received by February 1, the application will be canceled. If the applicant withdraws from the project after the design has been complete, the deposit will be retained by the LPNNRD unless conditions in XII. B. apply.
- E. In February of each year, the Natural Resources Conservation Service will be requested to proceed with survey and design of approved projects.
- F. After receiving LPNNRD approval, the applicant will be given two years to obtain necessary permits, complete the structure and submit all required paperwork. If the project is delayed due to adverse weather conditions, or other conditions beyond the

applicant's control, an extension may be granted by the LPNNRD Board of Directors. Extensions will be considered by the LPNNRD Board on a case-by-case basis.

VIII. LAND RIGHTS, AGREEMENTS AND PERMITS

- A. The applicant is responsible for obtaining any required easements and any required federal, state and local (i.e. NDNR, Army COE, and County Zoning) permits.
- B. The applicant is responsible for the relocation or modification of water lines, power lines and telephone lines and pay the costs involved.
- C. The applicant will be required to enter into a 25-year cost-share agreement with the LPNNRD. This agreement states that the applicant will refund cost-share funds if the project is removed, altered, or modified without the consent of the LPNNRD.

IX. STRUCTURE DESIGN AND CONSTRUCTION

- A. The NRCS will be requested to survey, design, and supervise all structures approved by the LPNNRD Board.
- B. Construction will not commence until formal notice to proceed is given by the LPNNRD. This notice will be given after NRD Board approval, and after receiving the applicant's deposit and signed cost-share agreement.

X. FINAL APPROVAL AND PAYMENT

- A. Final Approval and Payment will occur when:
 - 1. The project is completed and certified by the NRCS/NRD technician to meet all NRCS standards and specifications.
 - 2. The completed application form NSWCP-3 is signed and returned to the LPNNRD with a copy of all project bills.

XI. OPERATION AND MAINTENANCE

The landowner is responsible for all operation and maintenance after project construction.

XII. SMALL DAM DEPOSIT REQUIREMENT & REIMBURSEMENT

- A. The applicant will be required to submit a \$500 deposit to the NRD before a survey or design is started. The deposit will be returned to the applicant after NRCS approves the completed project and all paperwork is submitted and approved by the District. If the deposit is not received by February 1, the application will be canceled. If the applicant withdraws from the project after the design has been complete, the deposit will be retained by the LPNNRD unless conditions in B. apply.
- B. If a landowner does not proceed with the small dam project because the final cost estimate is 40% or more over the original project estimate, the LPNNRD will return the \$500 deposit based on financial hardship. All other conditions will be reviewed by the Projects Committee on a case-by-case basis.

**LOWER PLATTE NORTH NRD
SWCP ATTACHMENT D
WINDBREAK RENOVATION PRACTICE**

I. PURPOSE

To provide for the restoration of farmstead, acreage or field windbreaks that have been rendered substantially ineffective due to the death of trees or other windbreak plantings as a result of weather, disease, or other natural causes.

II. PLAN REQUIREMENT

A windbreak renovation plan is to be based on a plan reviewed and approved by a forester of the Nebraska Forest Service. The forester is to certify that the windbreak has lost its effectiveness, should be renovated and that they approve the plan of renovation.

III. SITE PREPARATION

Tree removal off the site is required to be accomplished in late fall/early winter at least before the planting occurs the following spring. The only area that is replanted with a new windbreak receives cost share for removal costs. Tree removal work should not be initiated until the application is approved by the Lower Platte North NRD and the landowner agrees to replant the windbreak in the same area.

IV. COST SHARE RATE AND MAXIMUM ASSISTANCE

The windbreak renovation cost-share payment will not be based on a cost greater than the county average unit cost adopted by the USDA-FSA. The renovation practice is not to include the replanting of the windbreak because of different cost-share percentage rates. The windbreak planting cost-share will be separate. The Lower Platte North NRD will cost share at a 50% rate, up to \$1,000.

Tree planting cost-share is eligible for riparian buffers, farmsteads, acreages, field and livestock protection windbreaks. Windbreaks must contain 200 or more trees and shrubs which are purchased through and planted by the NRD. When the planting is strictly for wildlife habitat, a minimum of 300 trees/shrubs purchased and planted by the NRD is required.

**LOWER PLATTE NORTH NRD
SWCP ATTACHMENT E
FOR EMERGENCY REPAIR OF CONSERVATION PRACTICES**

I. PURPOSE

On occasion, the LPNNRD Board of Directors may approve local SWCP funds for the Repair of conservation practices damaged from intense rainstorms. The decision for approving emergency repair funds will be considered annually, with the location and total amount of available funds dependent on the severity of storm damage to conservation practices in designated areas in the District. When approved by the Board, Emergency repair funds will be allocated in the following manner:

- A. The LPNNRD Board will consider approval of the amount and eligible area for emergency repair funds, with a recommendation from the Projects Committee. Typically, this will occur on or prior to the LPNNRD September Board Meeting.
- B. Only eligible Conservation Practices, two years old and newer that were originally built to NRCS design specifications, will be eligible for cost-share assistance.
- C. The committee will consider approval of emergency repair assistance only when it is determined by an NRCS technician that the damage was not due to landowner negligence in performing normal maintenance as outlined in NRCS O&M specifications.
- D. To be eligible for emergency repair funds, the landowner must be following an approved NRCS farm plan.
- E. Prior to LPNNRD approval, applications will receive recommendations from LPNNRD and NRCS staff. The LPNNRD Projects Committee will prioritize application practices and areas.
- F. Eligible assistance will be 50% of the approved amount up to a maximum of \$1,000 per landowner per program period.

**LOWER PLATTE NORTH NRD
SWCP ATTACHMENT F
2020 LANDS FOR CONSERVATION PROGRAM
(Sub-watershed areas: North Fork – Wahoo Creek, Dunlop –
Wahoo Creek and Miller Branch – Wahoo creek)**

Purpose: The Lands for Conservation program provides landowners with an incentive to get conservation structures constructed on the land during the growing season.

1. The Lands for Conservation program will be on contractual basis between the landowner (cooperator) and the Lower Platte North Natural Resources District for one year while conservation practices are being established. Applications deadline for each calendar year will be February 1.

2. Sediment and Water Control Basins with tile outlets and/or terraces with grassed waterways and terraces with tile outlets qualify for this program. Sediment and Water Control Basins/Terraces and/or waterways must be seeded during the contract period.

3. NRCS and/or NRD personnel will design terraces with waterways or tile drains or Sediment and Water Control Basins with tile outlets. These practices must protect the entire field on which they are established. However, the area under contract will be the smallest practical area to encompass the practices, as agreed upon with the cooperator.

4. Land enrolled in another program (ex: CRP) may not be eligible for Lands for Conservation contracts.

5. Sediment and Water Control Basins with tile outlets and terraces with waterways or tile outlets may be cost-shared through the EQIP program administered by Natural Resources Conservation Service (NRCS). If federal funds are not available, cost-sharing assistance may be available through LPNNRD's Soil & Water Conservation Cost-Share Program.

6. **Construction must be done between June 1 and September 15.** The field must be available for construction by August 1. The area enrolled in the LPNNRD Lands for Conservation will be planted to cover crop or a non-grain forage crop (forage sorghum, etc.) preceding and/or after construction. The crop or cover may be harvested or pastured during the contract period.

7. **For 2020: Payment is \$198 per acre***.

*Payment Rate will be reviewed annually. Payment rate is based on 2017 Nebraska Non-Irrigated Cropland Cash Rent Paid per Acre, Source: USDA National Agricultural Statistics Service.

Payment will not be processed and forward to the NRD applicant until the project (including the planting of the cover crop) has been certified as completed by the NRCS.

8. If used for permanent pasture before or after the contract period, these areas are not eligible for the Lands for Conservation Program. Money received through this program resulting in permanent pasture after the contract period, must be returned. Land can be used for hayland as a normal part of the crop rotation.

9. If ownership of land changes during the contract period, the contract becomes void. The new owner may continue the contract, if agreed to with the Lower Platte North NRD.

10. Approval of contracts will be on a rotating basis.

11. The landowner will contract for the construction of Sediment and Water Control Basins, terraces, waterways, tile outlets and any other necessary construction.

12. Terraces, Sediment and Water Control Basins, waterways and tile outlets must be maintained for 10 years or as long as the current owner has control of the land, whichever is less.

13. **Eligible Watersheds for the Lands for Conservation Program: Within the Wahoo Watershed, three of the HUC 12 sub watersheds were identified as highest priority areas for this program: North Fork-Wahoo Creek, Dunlop Creek and Miller Branch-Wahoo Creek. The Shell Creek Watershed**



FYRA Engineering, LLC
 12702 Westport Parkway, Suite 300
 Omaha, NE 68138
 Phone: 402.502.7131
 Fax: 402.932.6940

INVOICE FOR SERVICES

Lower Platte North NRD
Tom Mountford
511 Commercial Park Road
Wahoo, NE 68066

DATE: 28 March 2020
PROJECT NO.: 022-17-02
PERIOD COVERED: 25 Jan 2020 Through 20 Mar 2020
INVOICE NO.: 022-042
FED ID: 45-5611118

Project Name: Wahoo Creek Watershed Plan/EA
Contract Amount: \$574,990.00
31 Oct 2019 Addendum Amount \$48,000.00
Contract Date: 8 December 2017

022-17-02-1.02-Coord Meetings w/NRCS

Description	Employee	Billing Rate	Hours	Current Due
Engineer	Kaufman, Janel	\$ 150.00	4.50 \$	675.00
022-17-02-1.02-Coord Meetings w/NRCS			0.00 \$	675.00

022-17-02-1.04-Monthly Invoicing/Schedule

Description	Employee	Billing Rate	Hours	Current Due
Admin	Stratton, Ann	\$ 75.00	1.50 \$	112.50
022-17-02-1.04-Monthly Invoicing/Schedule			1.50 \$	112.50

022-17-02-1.06-Plan Review

Description	Employee	Billing Rate	Hours	Current Due
Engineer	Kaufman, Janel	\$ 150.00	5.00 \$	750.00
Expenses		\$ -	- \$	56.84
022-17-02-1.06-Plan Review			- \$	806.84
Task 1 Total			\$	1,594.34

022-17-02-2.01-Develop, Write & Summarize Plan

Description	Employee	Billing Rate	Hours	Current Due
Subconsultant	EA	\$ -	- \$	3,060.00
022-17-02-2.01-Develop, Write & Summarize Plan			\$	3,060.00
Task 2 Total			\$	3,060.00

022-17-02-5-Additional services for the Wahoo Creek Watershed Plan-EA

Description	Employee	Billing Rate	Hours	Current Due
Engineer	Kaufman, Janel	\$ 150.00	3.00 \$	450.00
022-17-02-4.05-Site Survey			3.00 \$	450.00
Task 5 Total			\$	450.00

TOTAL DUE CURRENT INVOICE: \$ 5,104.34

CONTRACT AMOUNT: \$ 622,990.00
PREVIOUS BILLING: \$ 597,205.89
CURRENT INVOICE: \$ 5,104.34
TOTAL INV'D. TO DATE: \$ 602,310.23
CONTRACT REMAINING: \$ 20,679.77

Make all checks payable to:
 FYRA Engineering, LLC
 12702 Westport Parkway, Suite 300
 Omaha, NE 68138

Lower Platte North NRD
 Tom Mountford
 511 Commercial Park Road
 Wahoo, NE 68066

DATE: 28 March 2020
 PROJECT NO.: 022-17-02
 PERIOD COVERED: 25 Jan 2020 Through 20 Mar 2020
 INVOICE NO.: 022-042
 FED ID: 45-5611118

Project Name: Wahoo Creek Watershed Plan/EA
 Contract Amount: \$574,990.00
 31 Oct 2019 Addendum Amount \$48,000.00
 Contract Date: 8 December 2017

Summary for Invoice: 022-039
 Project Name: Wahoo Creek Watershed Plan/EA

Tasks	Contracted Fee	Previously Billed	This Invoice	Total To Date	% Complete
022-17-02-1.01 Coord Meetings w/LPNNRD	\$ 5,724	\$ 16,175.49	\$ -	\$ 16,175.49	282.58%
022-17-02-1.02-Coord Meetings w/NRCS	\$ 8,904	\$ 7,113.75	\$ 675.00	\$ 7,788.75	79.89%
022-17-02-1.03-Project Meetings	\$ 49,372	\$ 23,605.04	\$ -	\$ 23,605.04	47.81%
022-17-02-1.04-Monthly Invoicing/Schedule	\$ 7,875	\$ 13,191.75	\$ 112.50	\$ 13,304.25	168.94%
022-17-02-1.05-Project Scoping	\$ 7,170	\$ 7,068.75	\$ -	\$ 7,068.75	98.59%
022-17-02-1.06-Plan Review	\$ 6,740	\$ 11,708.00	\$ 806.84	\$ 12,514.84	130.87%
022-17-02-2.01-Develop, Write & Summarize Plan	\$ 60,100	\$ 79,951.48	\$ 3,060.00	\$ 83,011.48	113.24%
022-17-02-2.02-Maintain Admin Record	\$ 3,560	\$ 859.25	\$ -	\$ 859.25	24.14%
022-17-02-2.03-Develop and Describe Purpose & Need	\$ 2,320	\$ 1,820.00	\$ -	\$ 1,820.00	78.45%
022-17-02-2.04-Formulate, Describe & Compare Alternatives	\$ 27,270	\$ 19,239.25	\$ -	\$ 19,239.25	70.55%
022-17-02-2.05-Collect & Analyze Social/Demographic Data	\$ 1,435	\$ 1,562.50	\$ -	\$ 1,562.50	108.89%
022-17-02-2.06-Historic & Cultural Resources	\$ 675	\$ 9,869.00	\$ -	\$ 9,869.00	1462.07%
022-17-02-2.07-Prime & Unique Farmland	\$ 675	\$ 2,404.75	\$ -	\$ 2,404.75	356.26%
022-17-02-2.08-Identify Wetlands & Other Water Bodies	\$ 117,145	\$ 102,862.36	\$ -	\$ 102,862.36	87.81%
022-17-02-2.09-Collect Soils Data	\$ 810	\$ -	\$ -	\$ -	0.00%
022-17-02-2.10-Identify and Anlyze Soil Erosion	\$ 810	\$ 1,952.75	\$ -	\$ 1,952.75	241.08%
022-17-02-2.11-Collect & Analyze Floodplain Data	\$ 3,900	\$ 6,521.00	\$ -	\$ 6,521.00	167.21%
022-17-02-2.12-Collect & Analyze Data on Critical Areas	\$ 6,300	\$ 3,071.00	\$ -	\$ 3,071.00	48.75%
022-17-02-2.13-Identify Land Use and Crop Inventory	\$ 810	\$ 1,125.00	\$ -	\$ 1,125.00	138.89%
022-17-02-2.14-T&E Species & Migratory Birds	\$ 11,500	\$ 12,192.50	\$ -	\$ 12,192.50	106.02%
022-17-02-2.15-Consumptive Use Data	\$ 1,840	\$ 1,366.50	\$ -	\$ 1,366.50	74.27%
022-17-02-2.16-Effects on Public Health & Safety	\$ 4,440	\$ 1,936.00	\$ -	\$ 1,936.00	43.60%
022-17-02-2.17-Effects to Homes/Bus/Ag	\$ 4,440	\$ 4,124.75	\$ -	\$ 4,124.75	92.90%
022-17-02-2.18-Cummulative Impacts	\$ 11,080	\$ 2,821.25	\$ -	\$ 2,821.25	25.46%
022-17-02-2.19-Federal, State & Local Permits	\$ 1,790	\$ 1,775.00	\$ -	\$ 1,775.00	99.16%
022-17-02-2.20-Conflicts w/Other Plans	\$ 4,460	\$ 3,822.50	\$ -	\$ 3,822.50	85.71%
022-17-02-2.21-Interagency & Public Involvement	\$ 2,940	\$ 5,197.02	\$ -	\$ 5,197.02	176.77%
022-17-02-2.22-Risk & Uncertainty	\$ 4,880	\$ 4,292.00	\$ -	\$ 4,292.00	87.95%
022-17-02-2.23-Preferred Alternatives Discussion	\$ 11,840	\$ 14,006.00	\$ -	\$ 14,006.00	118.29%
022-17-02-2.24-Mitigation Features	\$ 6,760	\$ 4,486.00	\$ -	\$ 4,486.00	66.36%
022-17-02-2.25-Hydrologic Investigation	\$ 26,460	\$ 33,403.25	\$ -	\$ 33,403.25	126.24%
022-17-02-2.26-Economic Data & Discussion	\$ 14,640	\$ 51,211.00	\$ -	\$ 51,211.00	349.80%
022-17-02-2.27-Installation & Financing	\$ 2,600	\$ 775.00	\$ -	\$ 775.00	29.81%
022-17-02-2.28-Operations, Maintenance & Replacement	\$ 3,240	\$ 740.00	\$ -	\$ 740.00	22.84%
022-17-02-2.29-Project Maps	\$ 24,850	\$ 28,438.25	\$ -	\$ 28,438.25	114.44%
022-17-02-2.30-Utility Investigations	\$ 5,200	\$ 1,940.00	\$ -	\$ 1,940.00	37.31%
022-17-02-2.31-Recreation Site 77 Planning	\$ 7,350	\$ -	\$ -	\$ -	0.00%
022-17-02-3.01-Interagency Scoping Mtg	\$ 10,720	\$ 6,396.50	\$ -	\$ 6,396.50	59.67%
022-17-02-3.02-Agency Coord	\$ 7,680	\$ 6,181.00	\$ -	\$ 6,181.00	80.48%
022-17-02-4.01-Breach Analysis	\$ 26,343	\$ 36,054.50	\$ -	\$ 36,054.50	136.87%
022-17-02-4.02-Hydraulics/Structure Sizing	\$ 19,244	\$ 30,321.25	\$ -	\$ 30,321.25	157.56%
022-17-02-4.03-Develop Land Rights & Structure Costs	\$ 29,784	\$ 29,048.25	\$ -	\$ 29,048.25	97.53%
022-17-02-4.04-Land Rights Assessment	\$ 4,534	\$ 1,496.25	\$ -	\$ 1,496.25	33.00%
022-17-02-4.05-Site Survey	\$ 14,779	\$ 5,080.00	\$ -	\$ 5,080.00	34.37%
022-17-02-5-Additional services for the Wahoo Creek Watershed Plan-EA	\$ 48,000	\$ -	\$ 450.00	\$ 450.00	0.94%
Totals:	\$ 622,990	\$ 597,205.89	\$ 5,104.34	\$ 602,310.23	93.46%

Expenses Breakdown

022-17-02-1.06-Plan Review

Expense Type	Amount
Mileage	\$ 56.84
	\$ 56.84



MEMORANDUM

TO: Michael Sotak
FYRA Engineering

FROM: Robb Lutz, EA Engineering, Science, and Technology, Inc., PBC (EA)

RE: Progress Report – Wahoo Creek Watershed Plan
EA# 1566201

DATE: 2/20/2020

TIME PERIOD: 01/1/2020 to 01/31/2020

This progress report describes the project effort for the above time period.

Work Completed This Period: (on next page)

- Phase 2 – Plan/EA Development
 - Finalized sediment and erosion sections of the plan

Tasks	Wahoo Creek Watershed Plan / EA	Current Period Effort	Contract Budget	Previous Effort	Remaining Budget
Task No.	Project Management				
2.1	Develop, Write, and Summarize Plan	\$3,060	\$15,200	\$12,355	-\$215
2.2	Maintain Administrative Record	\$0.00	\$640	\$0	\$640
2.3	Develop and Describe Purpose and Need	\$0.00	\$230	\$0	\$230
2.4	Formulate, Describe, and Compare Alternatives	\$0.00	\$3,045.00	\$3,034.00	\$11.00
2.8	Identify Wetlands (Includes Wetland Delineation) and other Water Bodies	\$0.00	\$21,260.00	\$23,845	-\$2,585.46
2.12	Collect and Analyze data on Critical Areas	\$0.00	\$1,020	\$0	\$1,020
2.18	Analyze and Describe Direct, Indirect, and Cumulative Impacts	\$0.00	\$1,880	\$0	\$1,880
2.19	Research, List, and Describe required Federal, State, and Local Permits	\$0.00	\$870	\$0	\$870
2.20	Identify Relationship and Possible Conflicts to Other Plans, Policies, and Controls	\$0.00	\$1,100	\$0	\$1,100
2.21	List and Discuss Interagency and Public Involvement	\$0.00	\$1,100	\$0	\$1,100
2.23	Develop and Describe Preferred Alternative, including structural details	\$0.00	\$4,800	\$11,642	-\$7,355.00
2.24	Develop and Discuss Mitigation Features	\$0.00	\$1,240	\$0	\$1,240
2.25	Hydrologic Investigation	\$0.00	\$3,120	\$3,142	\$1,055
2.28	Operations, Maintenance, and Replacement Discussion	\$0.00	\$640	\$0	\$640
2.29	Development of Required Project Maps	\$0.00	\$2,100.00	\$2,398	-\$298.00
2.30	Utility Investigations	\$0.00	\$1,480	\$0	\$1,480
Plan/EA Development Task Total		\$3,060.00	\$59,725.00	\$55,852.46	\$812.54



EA Engineering, Science, and Technology, Inc., PBC

221 Sun Valley Boulevard
Suite D
Lincoln, NE 68528-1576
Phone: 402-476-3766
Federal ID: 52-0991911

PLEASE REMIT PAYMENT TO:

Via Mail:
225 Schilling Circle, Suite 400
Hunt Valley, MD 21031-1800

Via ACH:
SunTrust Bank
Acct Number: 59869458
Routing #: 021052053

Invoice Date : 02/27/2020

Invoice # : 135445

EA Project # : 1566201

Terms : Due upon Receipt

EA Project Manager : LUTZ, ROBERT

Attn: Michael K. Sotak, PE
FYRA Engineering, LLC
12702 Westport Parkway
Suite 300
Omaha, NE 68138

Client Contract No: 022-17-02

For Professional Services Rendered through: 1/31/2020

Wahoo Creek Watershed Plan/NEPA Document
(Email invoice to Mike Sotak, Lindy Rogers & Ann Stratton.)

Salaries

Rate Schedule Labor	3,060.00	
	Total Salaries	<u>3,060.00</u>
	Amount Due This Invoice	<u>3,060.00</u>

FEE SUMMARY

Project Fee	104,421.00
Total Billed To Date	99,971.45
Fee Available	4,449.55
% Fee Available	4.26

Interest charges accrue at 1.5% per month for balances over 30 days.
(Contractual agreements supercede standard EA billing terms).

EA Engineering, Science, and Technology, Inc., PBC does business in the following jurisdictions under the names listed below:

California	DBA - EA Engineering, Science, and Technology, Inc.	New York	DBA - EA Science and Technology
Michigan	DBA - EA Science and Technology	North Carolina	DBA - EA Science, and Technology, Inc.
Missouri	DBA - EA Engineering, Science, and Technology, Inc.	Washington D.C.	DBA - EA Engineering, Science, and Technology, PBC Inc.



Labor and Expense Detail for 1566201 -- Wahoo Creek Watershed Plan

Phase: 0002 -- Watershed Plan/EA Development

Rate Schedule Labor

<u>Class / Employee Name</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Mid Engineer				
LUTZ, ROBERT	01/15/2020	1.50	115.00	172.50
	01/17/2020	3.50	115.00	402.50
		-----		-----
		5.00		575.00
Total: Mid Engineer		5.00		575.00

Rate Schedule Labor 575.00

Labor : 575.00
Expense : 0.00

Total Phase: 0002 -- Watershed Plan/EA Development 575.00

Phase: 0003 -- Preliminary Design

Rate Schedule Labor

<u>Class / Employee Name</u>	<u>Date</u>	<u>Hours</u>	<u>Rate</u>	<u>Amount</u>
Junior Engineer				
LUSH, MEGAN	01/13/2020	1.00	70.00	70.00
	01/14/2020	3.00	70.00	210.00
	01/15/2020	2.50	70.00	175.00
	01/16/2020	2.50	70.00	175.00
	01/17/2020	4.00	70.00	280.00
LUSH, MEGAN	01/20/2020	4.00	70.00	280.00
LUSH, MEGAN	01/27/2020	3.50	70.00	245.00
	01/28/2020	3.50	70.00	245.00
	01/29/2020	3.50	70.00	245.00
	01/30/2020	4.00	70.00	280.00
	01/31/2020	4.00	70.00	280.00
		-----		-----
		35.50		2,485.00
Total: Junior Engineer		35.50		2,485.00

Rate Schedule Labor 2,485.00

Labor : 2,485.00
Expense : 0.00

Total Phase: 0003 -- Preliminary Design 2,485.00

Labor : 3,060.00
Expense : 0.00

Total for EA Project # : 1566201 -- Wahoo Creek Watershed Plan 3,060.00

Invoice



601 P St Suite 200
PO Box 84608
Lincoln, NE 68501-4608
Tel 402.474.6311, Fax 402.474.5063

March 20, 2020
Invoice No: 352722

Tom Mountford
Assistant Manager
Lower Platte North NRD
PO Box 126
Wahoo, NE 68066-0126

Invoice Total \$7,781.14

Olsson Project # 018-3423 Lower Platte North NRD Wahoo Creek Watershed & 11 Dam Sites
Professional services rendered February 2, 2020 through March 7, 2020 for work completed in accordance with agreement.

Phase 010 Sites 26A 26B & 27 Project Management

Labor

	Hours	Amount	
Senior Administrative Coordinator	.50	34.63	
Senior Engineer	4.00	683.76	
Totals	4.50	718.39	
Total Labor			718.39
		Total this Phase	\$718.39

Phase 020 Geotechnical Engineering

Labor

	Hours	Amount	
Team Leader	2.50	530.23	
Project Engineer	49.50	5,616.27	
Senior Technician	13.50	916.25	
Totals	65.50	7,062.75	
Total Labor			7,062.75
		Total this Phase	\$7,062.75

Billing Limits

	Current	Prior	To-Date
Total Billings	7,781.14	204,181.27	211,962.41
Limit			583,825.00
Balance Remaining			371,862.59

AMOUNT DUE THIS INVOICE \$7,781.14

Outstanding Invoices

Number	Date	Balance
349916	2/12/2020	7,702.71
Total		7,702.71

Email invoice to tmountford@lpnrd.org

Authorized By: Michael Placke

Progress Report for Wahoo Creek Watershed Dams Sites



Lower Platte North NRD

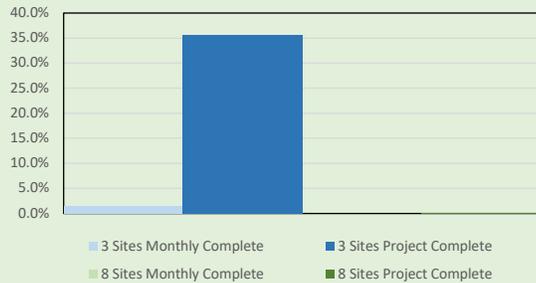
For Work Completed During The Month Of : **February, 2020**
(through 3/1/2020)

Project # 018-3423 Dam Site 26A, 26B, &27 Project Phase	Phase Budget	Billings for Month		Project Total Billings to Date	
		Current Earned/Billings	% Completed This Month	JTD Earned/Billings	% Completed Overall
010 - Project Management/Meetings	\$ 21,840	\$ 718.39	3.3%	\$ 5,816.41	26.6%
020 - Geotechnical Engineering	\$ 222,485	\$ 7,062.75	3.2%	\$ 143,815.32	64.6%
030 - Dam Design	\$ 173,160		0.0%	\$ 45,689.24	26.4%
040 - Permitting	\$ 79,960		0.0%	\$ 946.40	1.2%
050 - Survey and Legal Descriptions	\$ 10,780		0.0%	\$ 11,360.33	105.4%
060 - Community/Public Participation	\$ -			\$ -	
070 - Construction Services	\$ 75,600			\$ -	
				\$ -	
				\$ -	
3 Sites Totals	\$ 583,825	\$ 7,781.14	1.3%	\$ 207,627.70	35.6%

Project # A18-3423 (separate invoice) Sites 55, 66, 77, 82, 83, 84, 85, &86 Project Phase	Phase Totals	Billings for Month		Project Total Billings to Date	
		Current Earned/Billings	% Completed This Month	JTD Earned/Billings	% Completed Overall
100 - Project Management/Meetings	\$ 62,400		0.0%	\$ -	0.0%
110 - Geotechnical Engineering	\$ 607,460		0.0%	\$ -	0.0%
120 - Dam Design	\$ 436,278		0.0%	\$ -	0.0%
130 - Permitting	\$ 251,140		0.0%	\$ -	0.0%
140 - Survey and Legal Descriptions	\$ 28,875		0.0%	\$ -	0.0%
150 - Community/Public Participation	\$ 30,000		0.0%	\$ 429.02	1.4%
160 - Other	\$ -			\$ -	
8 Sites Totals	\$ 1,416,153	\$ -	0.0%	\$ 429.02	0.0%

Billings For Month	\$ 7,781.14
Total Billings To Date	\$ 208,056.72
Project Budget	\$ 1,999,978
Budget Remaining	\$ 1,791,921.28

% Budget Spent Per Site



* As suggested by the NRCS at the 3-11-19 LPNNRD board meeting, design will be slowed down for a few weeks while the watershed plan is being completed. We will continue with the geotechnical analysis

Summary Of Work Completed This Month	
<u>Sites 26A, 26B, & 27</u>	<u>Eight Sites</u>
	- No work on these sites
<p>We have continued to progress through analysis for dams 26A and 26B and finalized most of the appendices for all 3 dams. Each dam has differential settlement issues and will need 2 stage construction. The principal spillways will need to be located outside of the staged construction zones to prevent cracks extending around the pipes. We have also been looking at seepage and uplift in the principal spillway plunge pools</p>	

Planned Work For Next Month
- Due to waiting on approval of watershed plan, no design activities are planned for next month

For questions regarding billings, please contact Mike Placke at (402) 458-5957 or mplacke@olsson.com



Invoice

March 12, 2020

Project No: R191014.01

Invoice No: 115552

Invoice Amount: 1,491.25

Tom Mountford
Lower Platte North NRD
511 Commercial Park Road
PO Box 126
Wahoo, NE 68066

Project Manager Jeffrey Ray

Project R191014.01 Wahoo and Weston Zoning Update

Professional Services through March 6, 2020

	Contract Amount	Percent Complete	Billed-to-Date	Previous Billing	Current Billing
Hourly to a Maximum Phase(s)					
Dam Hazard Overlay	\$5,200.00		\$4,326.25	\$2,835.00	\$1,491.25
Total	\$5,200.00		\$4,326.25	\$2,835.00	\$1,491.25
Total Amount Due Upon Receipt					\$1,491.25

RESOLUTION NUMBER _____

WHEREAS, the Federal Disaster Mitigation Act of 2000 was signed in to law on October 30, 2000, placing new emphasis on state and local mitigation planning for natural hazards and requiring communities to adopt a hazard mitigation action plan to be eligible for pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, a Multi-Jurisdictional Hazard Mitigation Plan was prepared by the Lower Platte North Natural Resources District, with assistance from JEO Consulting Group, Inc. of Lincoln, NE.

WHEREAS, the purpose of the mitigation plan was to lessen the effects of disasters by increasing the disaster resistance of the Natural Resources District and participating jurisdictions located within the planning boundary by identifying the hazards that affect the Lower Platte North Natrual Resources District and prioritize mitigation strategies to reduce potential loss of life and property damage from those hazards, and

WHEREAS, FEMA regulations require documentation that the plan has been formally adopted by the governing body of the Lower Platte North Natural Resources District in the form of a resolution and further requesting approval of the plan at the Federal Level; and

NOW, THEREFORE, the governing body of the Lower Platte North Natural Resources District does herewith adopt the Lower Platte North Natural Resources District 2020 Multi-Jurisdictional Hazard Mitigation Plan Update in its entirety; and

PASSED AND APPROVED this ____ day of _____, 2020.

Board Chairperson

ATTEST:



Invoice

March 26, 2020
Project No: R170337.00
Invoice No: 115810
Invoice Amount: 31,098.08

Tom Mountford
Lower Platte North NRD
511 Commercial Park Road
PO Box 126
Wahoo, NE 68066

Project Manager Rebecca Appleford

Project R170337.00 Lower Platte North NRD Hazard Mitigation Plan 2020 Update
Professional Services through March 20, 2020

Table with 6 columns: Lump Sum Phase(s), Contract Amount, Percent Complete, Billed-to-Date, Previous Billing, Current Billing. Rows include Project Management, Public and Stakeholder Engagement, Data Collection, Develop Mitigation Plan, Submission and Adoption of the HMP, Parcel-Level Flood Risk Assessment - Fremont, Parcel-Level Flood Risk Assessment - Schuyler, Project Screening and Additional Project Tasks, and Total.

Email invoice to: Tom Mountford; tmountford@lpnrd.org & Jill Breunig; jbreunig@lpnrd.org



MONTHLY PROGRESS REPORT
Lower Platte North NRD Hazard Mitigation Plan Update

JEO PROJECT NO. 170337.00
Project Contact: Becky Appleford, 402.392.9915

Through the Period of March 20, 2020

-
- 1. Overall Project and Budget Status:**
 - Project Completion: 90% Budget: 99%

 - 2. Work completed during current period (thru March 20, 2020)**
 - a. Hazard Mitigation Plan Update**
 - Schedule and facilitated final several one-on-one meetings
 - Continued to finalized community profiles in preparation for public review
 - Drafted upfront regional section of the HMP
 - Initiated quality control review of HMP
 - Finalized maps
 - b. Fremont Parcel Level Assessment**
 - Completed potential mitigation action identification and prioritization
 - Completed draft report and continued development of web map and story map
 - Completed one on one meeting with the City to discuss assessment progress and related deliverables/next steps
 - Continued coordination with the City of Fremont regarding relationship of data collected to potential mitigation actions through the planned HMGP grant application
 - c. Schuyler Parcel Level Assessment**
 - Continued development of draft potential mitigation action identification and prioritization
 - Continued development of draft report and other deliverables
 - Completed one on one meeting with the City to discuss assessment progress and related deliverables/next steps

 - 3. Planned accomplishment for next period (March 20 – April 24, 2020):**
 - b. Hazard Mitigation Plan Update**
 - Complete QAQC of HMP in preparation for public review period
 - Finalize HMP document and post to project website for public review
 - Notify communities of open public review period
 - Anticipated April 3 – May 3.
 - Hold final meeting with NRD on HMP and parcel level assessments
 - Update project website
 - Provide information to the NRD and other stakeholders as requested
 - c. Fremont Parcel Level Assessment**
 - Distribute draft parcel assessment report and other deliverables to the City of Fremont for review
 - Continue coordination with the City of Fremont regarding relationship of data collected to potential mitigation actions through the planned HMGP grant application
 - d. Schuyler Parcel Level Assessment**
 - Complete identification of draft potential mitigation actions and preliminary prioritization
 - Distribute draft parcel assessment report and other deliverables to the City of Schuyler for review

- 4. Action items:**
 - Complete HMP draft
 - Post HMP to website
 - Mail letters to communities
 - Complete draft parcel assessment deliverables
 - Complete QAQC of documents
 - Provide correspondence as needed

- 5. Project schedule:**
 - On schedule

- 6. Information from NRD or Planning Team:**
 - None

- 7. Next Meeting Dates and Times:**
 - Friday, March 27 at 10am – web conference call

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DRAFT

1 PLAN PURPOSE AND BACKGROUND

The City of Fremont participates in the Lower Platte North Natural Resources District (NRD) Multi-Jurisdictional Hazard Mitigation Plan (HMP). As part of this planning effort for the 2020 HMP update, additional funding was requested and allocated through the Pre-Disaster Mitigation Grant program to provide the opportunity for participating communities to complete additional risk assessments for select floodprone properties within interested communities. Fremont, located in Dodge County, cost-shared this funding with the NRD to conduct targeted risk assessments for floodprone areas of the community and the community's Extraterritorial Jurisdiction (ETJ) as shown on the effective Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). An overview of Special Flood Hazard Area (SFHA) flood risk areas identified on the effective FIRM is shown in Figure 1. Based on parcel data as reviewed for the City of Fremont participant section in the HMP, the value of improvements within the SFHA community wide is approximately \$1.25 billion.

In March 2019, significant flooding was experienced on many river systems throughout Nebraska. Rare circumstances, including significant snowpack, deep frost, extended cold weather, untimely rain events, and rapid warming, created record flows in the Platte and Elkhorn Rivers. For the City of Fremont, this resulted in significant flood damage impacts to public and private infrastructure within the flood hazard areas of the community located along these rivers. Flood risk for the Platte River is located in the southern part of Fremont, while flood risk from the Elkhorn River occurs east of Fremont. Within the Platte River floodplain, the Fremont, Farmland, and Railroad Levee (levee) provides an undetermined level of risk reduction to a portion of the flood risk area. During the March 2019 flooding, this levee failed and was breached at multiple locations, causing significant impacts near the breach locations. The levee is currently being evaluated for the purposes of assessing repair and improvement to support improved performance in future flood events, however, levee failure risk will remain. An overview of key flood risk regions of the City of Fremont within the Platte River floodplain is shown on Figure 2.

In support of risk assessment objectives of the HMP update and considering the significant impacts of the March 2019 flood event, JEO has completed an in-depth review of selected properties for the purposes of identifying flood risk and flood insurance cost reduction strategies for individual properties at risk of flooding from the Platte River and Elkhorn Rivers. This assessment also will support decision making by the City of Fremont in conjunction with additional flood risk reduction planning actions that have previously been completed or are ongoing. These include but are not limited to the Fremont Repetitive Loss Area Analysis (NeDNR and City of Fremont, 2014); mitigation actions anticipated by Fremont residents through funding obtained through an anticipated application for assistance through the Hazard Mitigation Grant Program (HMGP) (ongoing); evaluation and potential improvement of the Fremont, Farmland, and Railroad Levee (ongoing); and potential additional individual property mitigation actions identified through an U.S. Army Corps of Engineers (USACE) Section 205 study (ongoing). Further details regarding these other flood risk reduction actions that coordinate with the outcomes of this assessment and plan can be found in Section 6 of this report.

The overall purpose of this assessment and resulting plan is to identify and prioritize flood risk reduction alternatives on a property by property basis for selected structures in the SFHA. The plan also identifies

programmatic actions that can be taken by the community to reduce flood risks and insurance costs for all property owners with floodprone property. Ultimately, this assessment and resulting mitigation actions can be used to both reduce flood damage impacts of future flood events and reduce flood insurance costs for both individual homeowners and the community in general. Findings of the assessment, in conjunction with other ongoing mitigation actions, can be used by Fremont as a planning tool to prioritize flood risk reduction actions within the community. The results of the assessment and relative flooding risk information can also be used as a public engagement tool by the City to convey relative flood risk information to community residents.

DRAFT

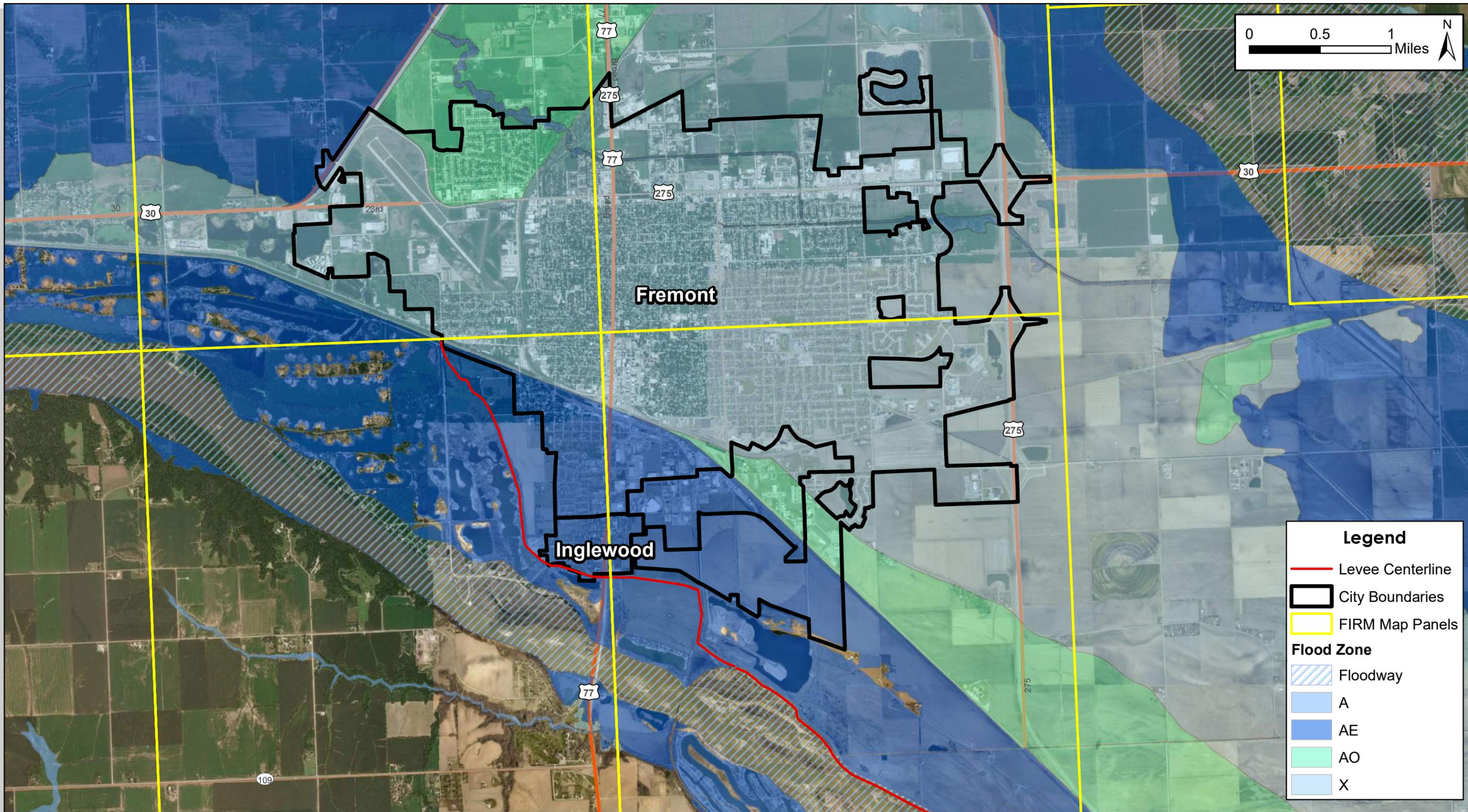


Figure 1: Effective FIRM Overview

Fremont, NE

Created By: DJV
 Date: 2/21/2020
 Software: ArcGIS 10.7.1

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.



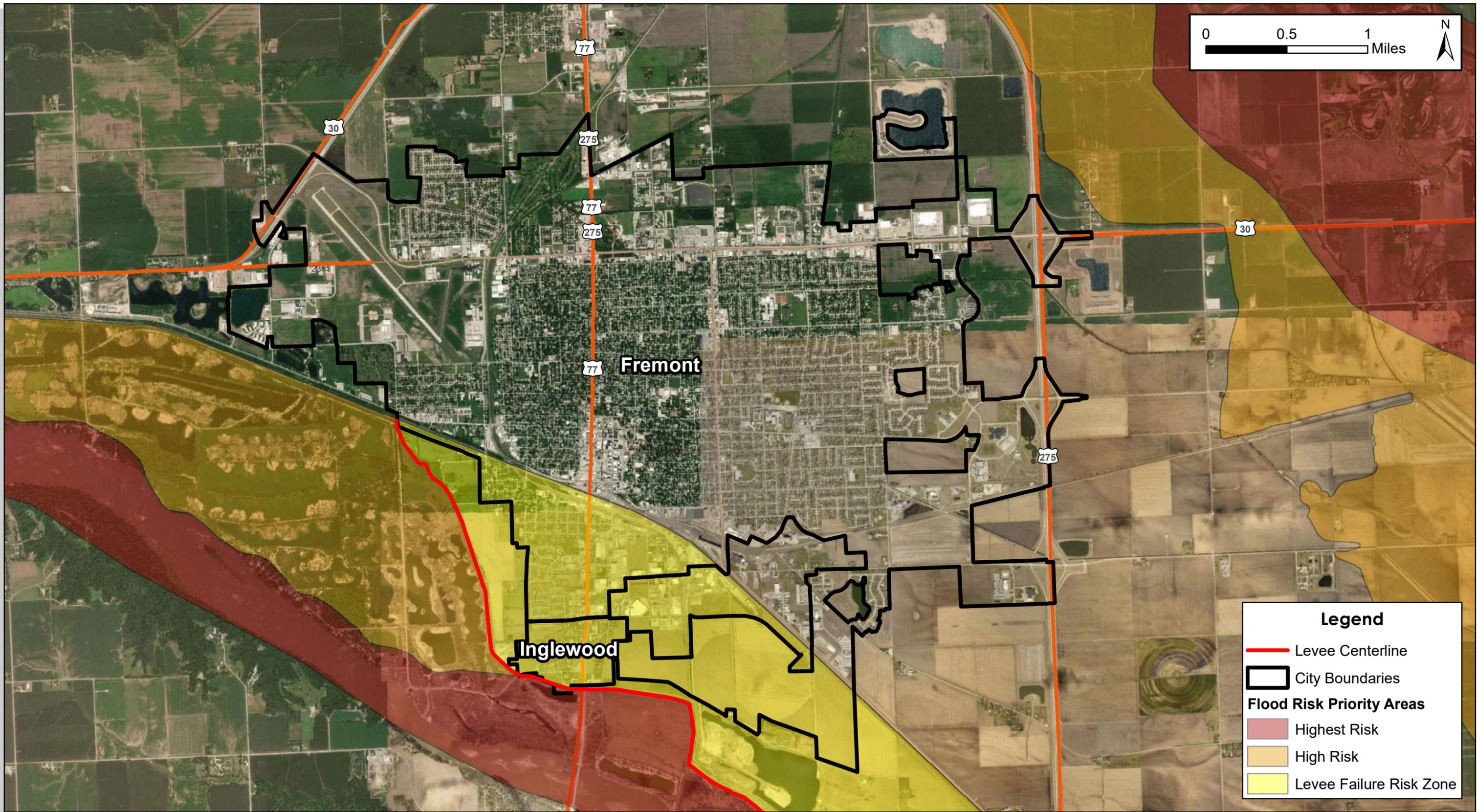


Figure 2: Flood Risk Priority Areas

Fremont, NE

Created By: DJV
 Date: 2/21/2020
 Software: ArcGIS 10.7.1

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.



2 FLOOD RISK ASSESSMENT

To identify and summarize the relative risk of flooding for properties within the SFHA of the Platte and Elkhorn Rivers, a flood risk assessment was developed for selected properties. The purpose of the flood risk assessment is to evaluate how deep flood water will be on the selected properties and anticipated flood risk to the structures on the properties during certain flooding events.

Key steps of the flood risk assessment included:

1. Property selection and field data collection to identify key property features.
2. Development of criteria to review and identify flood risk and potential flood damage factors for each property. These criteria are based on the effective FIRM and other known flood damage risks, such as flood impacts from the March 2019 flood event.
3. Development of a flood risk property score based on the flood risk and potential damage factors. This score will be used in conjunction with a mitigation action prioritization process to identify mitigation actions with the most flood risk reduction benefits for the selected properties.

The following sections outline in more detail the steps of the flood risk assessment process. Flood risk assessment flood risk factors and findings can also be seen on the interactive flood risk map which can be found at: XXXX

2.1 Property Selection and Field Data Collection

As a result of the March 2019 flooding, the City of Fremont is coordinating with local residents to identify property owners interested in taking immediate mitigation action using funding available through FEMA's HMGP program as a result of the widespread flooding impacts in Nebraska. Through this process, several residents expressed initial interest during the fall of 2019. The number of properties on this list has changed over time; currently 21 property owners are on the interest list and will potentially be included in the anticipated HMGP application. This does not include property owners from Doves Cove; these properties were added to the interest list in February 2020 and therefore were not included in the initial property selection process. The locations of properties on the initial HMGP interest list, along with a range of flood risk circumstances based on the effective FIRM combined with observations of key flood risk areas from the March 2019 flooding, were used to guide the locations of the properties selected for individual property flood risk assessment. This resulted in the identification of 82 properties for further review, including the initial HMGP interest list properties. The selected properties are located in specific areas of the Platte River and Elkhorn River SFHA and share similar risk characteristics with nearby properties; while not all properties in these areas were evaluated in general the flood risk for structures in the vicinity of an evaluated property will be similar. The selected properties include five in the Elkhorn River SFHA and 77 in the Platte River SFHA. An overview of the selected property locations can be seen in Figure 3.

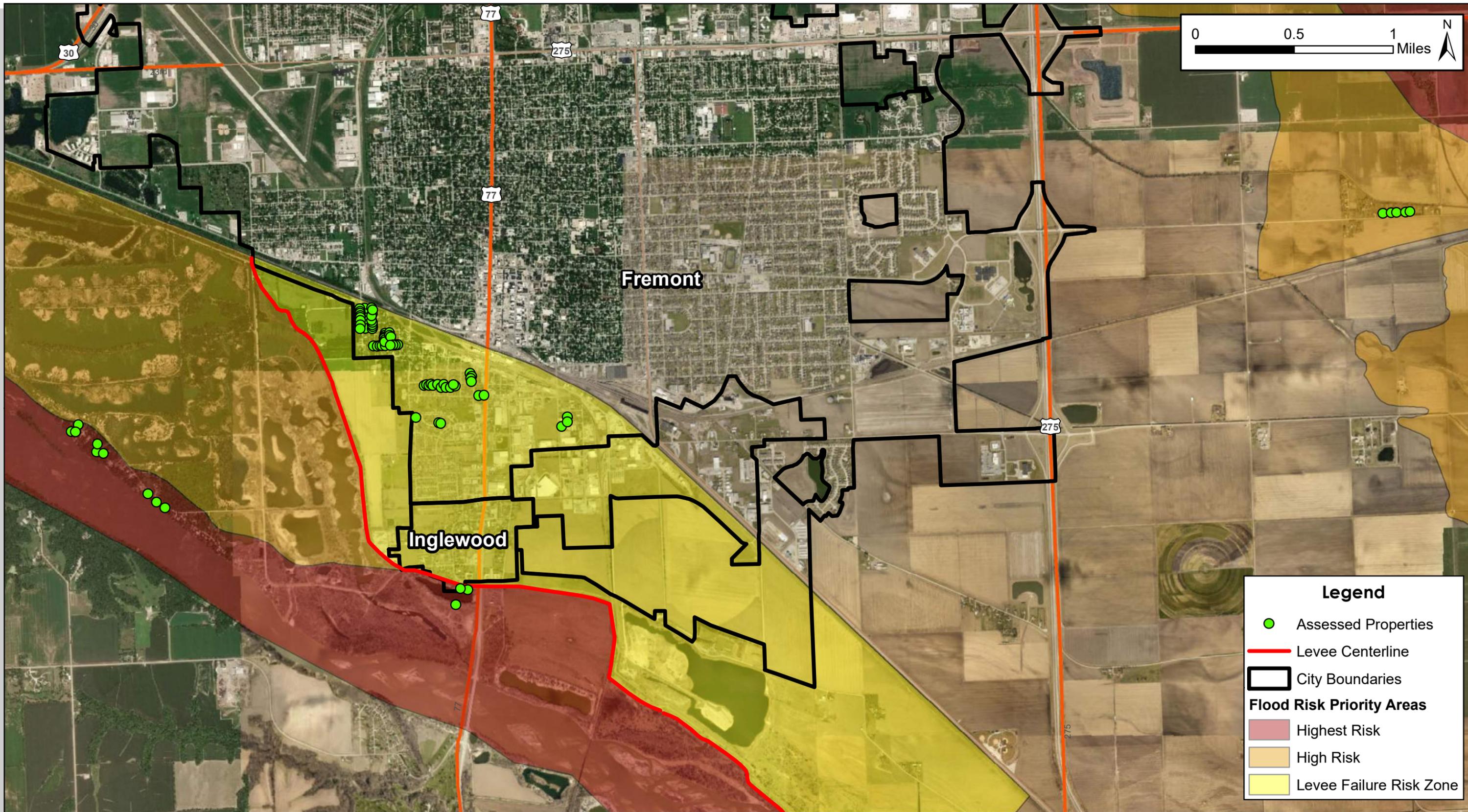


Figure 3: Assessed Properties Overview

Fremont, NE

Created By: DJV
 Date: 2/21/2020
 Software: ArcGIS 10.7.1

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

Legend

- Assessed Properties
- Levee Centerline
- City Boundaries

Flood Risk Priority Areas

- Highest Risk
- High Risk
- Levee Failure Risk Zone



For the selected properties, a field visit was conducted on August 20th and 21st, 2019. Observations collected using Collector for Arc GIS regarding the current conditions on the property at the time of the field visit and building characteristics. Key data collected included property photos, approximate location of lowest adjacent grade (LAG) and highest adjacent grade (HAG), number of steps from the ground to the first floor, foundation type, location of utilities, and general condition. The field data collection information was used in conjunction with flood risk data to determine the relative risk of flooding for each property, which was then used to inform mitigation action recommendations. Further details are provided in the following sections.

2.2 Flood Risk Review Criteria

To assess the relative risk of flooding for structures on each property selected, the effective Dodge County, NE FIRM and Flood Insurance Study (FIS) dated 1/2/2008 were utilized to develop flood elevations for specified frequencies of flooding, including the 10-year (10% annual chance), 50-year (2% annual chance), and 100-year (1% annual chance). The effective FIRM was utilized because it will be the baseline requirement for any short-term mitigation projects such as structure elevations. However, it should be noted that future flood studies for the Platte and Elkhorn Rivers may alter the flood risk elevation data. Since the evaluation was completed within GIS using best available data, if the flood risk component of this data is adjusted based on a new study the risk assessment can easily be updated using building elevations and other data used for the assessment.

For the Platte River at Fremont, flood elevations for each return period for the selected properties were derived from water surface rasters developed using the effective FIRM cross section GIS data set. Within the effective FIS, the Platte River has two profiles – one ‘with levee’ profile and a ‘levee failure’ profile that assumes that the levee is not providing flood risk reduction for properties on the land side of the levee. While the difference varies, the ‘levee failure’ flood profile is approximately 2-3 feet lower than the ‘with levee’ flood profile. However, in the effective FIRM GIS cross section data set, the regulatory flood elevation is the ‘with levee’ flood elevation. For the purposes of this evaluation, the flood elevations used are the ‘with levee’ flood elevations. The primary reasons for using this flood elevation is that it results in conservative actions for flood risk reduction purposes, and that real flood elevations during a flood event if the levee fails will likely be in between the ‘with levee’ and ‘levee failure’ flood elevations. Since a full analysis of levee failure scenarios is not available the conservative flood elevation was chosen.

For the Elkhorn River at Fremont, flood elevations for the assessed properties were determined on an individual property basis using the effective FIS profiles.

2.3 Flood Risk Review Process and Results

To develop flood risk exposure results for the selected properties, 2016 Eastern Urban Area LiDAR was used to develop building footprints for the primary structures (residential or non-residential structures) on each property. Building footprint boundaries were reviewed vs. aerial photographs and refined as needed. These building footprints along with field observations for each property were used to determine an estimated first floor elevation. This first-floor elevation was then compared to the flood elevations for the relevant flood frequencies developed from the effective FIRM to determine the depth of flooding for the structure for each return period, respectively. In general, if the building is flooded during a more frequent flood event such as the 10% annual chance flood, and/or has high flood depths for less frequent flooding such as the 1% annual chance flood, the greater the chance of recurring or significant flood damage impact from future flooding.

In addition to flood depths for the primary structure based on the effective FIRM, additional flood depth considerations were also reviewed. These included visually estimated external utilities elevations,

primarily HVAC equipment, based on photographs and site elevations. Also included were estimates of flood elevations from the March 2019 flood event. These estimates were based primarily on high water mark (HWM) observations collected by the U.S. Geological Survey (USGS) along with visual estimates of HWM available from field visit photographs. These flood elevations should be considered approximate due to limited amount of data available. However, they do provide valuable insight into the scope of the 2019 flood, with actual flood elevations being consistent with the 1% annual chance flood elevation published in the effective FIS. Finally, using depth grids produced from the effective FIS water surface rasters and 2016 LiDAR along with parcel data, a data set showing the highest depth of flooding on all properties in the area of interest surrounding the selected properties in the Platte River SFHA was developed. For properties that were not selected for parcel assessment, this provides additional information regarding relative flood risk and frequency of flooding.

The results of the flood risk assessment and related observations are provided in the online results map summary, which can be found here: XXXX.

2.4 Flood Risk Property Score

Using the results of the flood risk assessment for each property, a flood risk property score was developed. This was completed using selected criteria that describe the potential flooding impacts that could be experienced on each property. Heavier weighting (higher point values) was assigned to certain criteria such as flooding above the first floor of the building, critical facilities, and buildings that have been repetitively flooded or substantially damaged. A summary of the criteria used, and the point values assigned to each criteria can be found in the following Table 1.

Table 1: Flood Risk Property Score Criteria

Criteria	Property Flood Impacts	Base Points	% of possible total
1	Flooding above the first floor of a building	100	20.0%
2	Flooding of electrical and/or mechanical equipment	40	8.0%
3	Flood water is touching a portion of the building (likely crawlspace or unfinished basement being impacted)	40	8.0%
4	Property is completely surrounded by flood water (ingress/egress off of flooded property)	20	4.0%
5	Structure is completely surrounded by flood water (ingress/egress from building)	30	6.0%
6	Structure is completely surrounded by flood water AND is a Critical Facility	100	20.0%
7	Structure is completely surrounded by flood water AND is multi-family residential (additional people, vehicles)	50	10.0%
8	Flood water is touching a portion of the building AND has damage or substantial damage (subsidence, shifting, cracking) as a result of recent or cumulative flooding	100	20.0%
9	Flooding of exterior property improvements which are deemed functional necessities to reasonable use of single family or multi-family residential property (detached garage or shed)	20	4.0%
	Total Points Possible	500	

For each property, these criteria were reviewed, and points were assigned to generate the initial Flood Risk Property Score with a maximum initial score of 500. These scores were then supplemented by taking into account flood frequency factors as well as flood impact factors such as flow velocity, ice jam frequency, and levee breach risk. By incorporating these factors, the overall flood risk circumstances for each property can be differentiated. For example, a property in the floodway or flooded during the 10% annual chance flood has a much higher risk of being frequently flooded. Likewise, a property in the floodway has a higher risk of debris impacts due to higher flooding velocities and also is more likely to be impacted by an ice jam due to proximity to the river channel. By incorporating these factors, properties with otherwise similar flooding characteristics can be further prioritized based on relative risk of flooding impacts. A summary of these factors is provided in the following Table 2 and Table 3.

Table 2: Flooding Frequency Risk

Flooding Frequency Risk	Multiplier
Floodway	1
10% Annual Chance	1
2% Annual Chance	0.2
1% Annual Chance	0.1

Table 3: Flooding Impact Risk Factors

Factor	Description	Multiplier
Flow velocity risk	Higher flow velocities and debris impacts likely to be experienced closer to the river channel and riverward of the levee.	1.5
Ice jam flood risk area	Ice jam flooding risk and ice impact risk more likely to be experienced closer to the river channel and riverward of the levee.	1.5
Levee breach risk area	Potential impacts due to a levee breach	1.3

The results of the flood risk property scoring are provided in the online results map summary, which can be found here: XXXX. These results show which properties have the highest potential impacts based on flood depth, flooding frequency, and location within the floodplain. An overview of the flood risk property scores is provided in Figure 4.

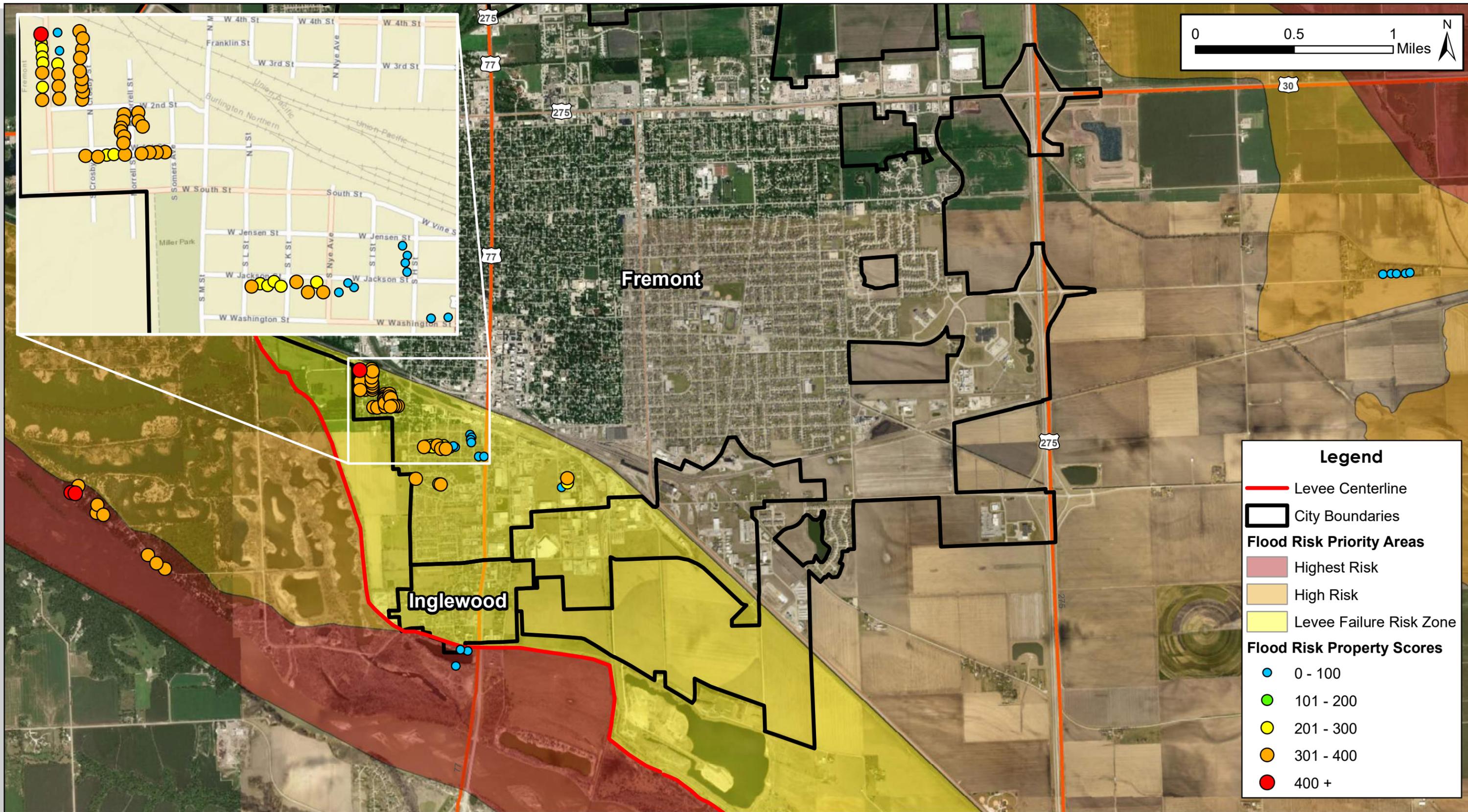


Figure 4: Flood Risk Property Scores

Fremont, NE

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3 FLOOD RISK REDUCTION ACTION RECOMMENDATIONS

Flood risk reduction actions provide the opportunity for a community and property owners to achieve both flood damage risk reduction as well as a potential decrease in flood insurance costs through actions that reduce the potential impacts of future flooding. To achieve this objective, thirteen potential non-structural (building modification) flood risk reduction actions were identified, along with eight potential programmatic (policy or program implementation) actions. The overall objective of these potential actions is to both reduce real flood damage risk and reduce the costs of a key programmatic flood risk reduction action all property owners can take which is obtaining flood insurance.

The following outlines the potential flood risk reduction actions reviewed for each property and the recommendations. Non-structural actions are property specific, with a planning level feasibility evaluation completed for each individual property using field observations and flood risk data. Similar nearby properties will have similar flood risk profiles and will likely benefit from similar flood risk reduction actions. Programmatic flood risk reduction actions apply to all parts of the community. Overall optimum flood risk reduction actions are likely a combination of one or more individual property actions plus programmatic actions taken at the community level.

3.1 Flood Risk Reduction Alternatives

3.1.1 Non-structural

Non-structural flood risk reduction actions represent building or property modifications that reduce the risk of flooding damages for a given property. Potential flood risk reduction alternatives at the individual property or community level are outlined below. For each individual property alternative, a summary description of each action, flood risk reduction effectiveness, typical cost range, and potential funding sources are noted along with whether the action could potentially gather additional points for the community through Fremont's participation in the NFIP's Community Rating System (CRS) program, which provides flood insurance discounts community wide as a result of certain flood risk reduction actions taken by the community. For more information on the CRS program and flood insurance, see Section 5. For more information on ongoing related studies and potential funding sources, see sections 6 and 7, respectively.

An overview of potential actions is provided in the following Table 4.

Table 4: Potential Non-structural Mitigation Actions

Alternative ID	Non-structural Alternative	Description	Flood Risk Reduction Effectiveness	Funding	Relative cost range	Potential CRS Benefits
1	Property Acquisition and Structure Demolition	Acquire property and demolish structures. If funded by FEMA grants, the property must remain open space.	Very High - removes structure from floodplain.	FEMA HMA, Local, Property Owner	Varies by property value and structure size. Typical cost in study area \$50,000 - \$175,000	Yes, Activity 420 and 520
2	Structure Demolition and Rebuild (Mitigation Reconstruction)	Demolish structure and re-build in compliance with local floodplain management requirements. This option is available for buildings that cannot be elevated for structural reasons.	High - reduces potential for flood damage, but structure remains in floodplain.	FEMA HMA, Local, Property Owner	Varies by property value and structure size. Typical cost in study area \$50,000 - \$175,000	Yes, Activity 530
3	Property Acquisition and Structure Relocation	Acquire property and move structures to a non-floodprone location. If funded by FEMA grants, the floodprone property must remain open space.	Very High - removes structure from floodplain.	FEMA HMA, Local, Property Owner	Varies by property value and structure size. Typical cost in study area \$50,000 - \$175,000	Yes, Activity 420 and 520
4	Property Acquisition, Demolition or Relocation, and Re-sale	Acquire property and demolish or move existing structures. This option is specifically locally funded, and provides an opportunity for the community to purchase the property for re-development in compliance with floodplain management requirements.	High - reduces potential for flood damage, but future development remains in floodplain.	Local	Varies by property value and structure size. Typical cost in study area \$50,000 - \$175,000	Yes, Activity 530
5	Structure Elevation	Elevation of the existing structure in place, potentially with a garage space and unfinished storage underneath that has flood vents installed. Requires abandonment of the existing basement, if applicable. Add vertical or lateral addition with safe room if possible; for structures with attached garages the garage space can be used for this. Should also include backflow prevention.	High - reduces potential for flood damage, but structure remains in floodplain.	FEMA HMA, Local, FHA 203(k) loan, Property Owner	Varies by structure size. Typical cost in study area \$50,000 - \$75,000	Yes, Activity 530
6	Abandon Basement and Fill	Typically involves adding flood vents. Should also include backflow prevention. Add vertical or lateral addition with safe room if possible.	Moderate - reduces potential for flood damage, but structure remains in floodplain.	FEMA HMA, Local, FHA 203(k) loan, Property Owner	Varies by structure size. Typical cost in study area \$20,000 - \$30,000	Yes, Activity 530
7	Dry Floodproofing of Structures	Retrofitting to make a structure watertight. Typically requires construction of a perimeter wall or sealant for existing walls combined with door closures. Also requires a plan for implementation of closures. Generally used only for non-residential; flood insurance benefits can only be obtained for this property type. Should also include backflow prevention.	Moderate - reduces potential for flood damage, but structure remains in floodplain.	FEMA HMA, Local, Property Owner	Varies by structure size. Typical cost in study area \$10,000 - \$30,000	Yes, Activity 530
8	Wet Floodproofing of Structures	Add flood vents to re-constructed or existing enclosed space below the first floor. Ideally combined with elevation or basement fill, but can be considered as a retrofitting technique for non-filled unfinished basements (helps prevent structural damage during flooding). Add backflow prevention.	Moderate - reduces potential for flood damage, but structure remains in floodplain.	FEMA HMA, Local, FHA 203(k) loan, Property Owner	Varies by structure size. Typical cost in study area \$5,000 - \$10,000. Included in the costs of a typical elevation project.	Yes, Activity 530
9	Levee/Floodwall Protection for Multiple Structures	Construction of a levee or floodwall for groups of structures. Generally applicable only to relatively small groups of structures requiring flood risk reduction.	Moderate - reduces potential for flood damage, but structure remains in floodplain. Failure or overtopping of the levee or floodwall can result in catastrophic damage.	FEMA HMA, Local, Property Owner	Not applicable to study area.	Yes, Activity 530
10	Utility Elevation/Backflow prevention	Elevate utilities and install backflow prevention devices on sanitary sewer services.	Low - reduces severity of damage/utility down time but structure remains at risk.	FEMA HMA, Local, FHA 203(k) loan, Property Owner	Varies by individual property requirements. Typical cost in study area \$5,000 - \$10,000.	Yes, Activity 530
11	Partial Dry Floodproofing	Partial dry floodproofing retrofit to reduce risk from higher frequency flooding.	Moderate to Low, depending on elevation of risk reduction action - reduces potential for flood damage, but structure remains in floodplain.	Local, Property Owner	Varies by structure size. Typical cost in study area \$10,000 - \$30,000	Yes, Activity 530
12	Partial Wet Floodproofing	Partial wet floodproofing retrofit to reduce risk from higher frequency flooding.	Moderate to Low, depending on elevation of risk reduction action - reduces potential for flood damage, but structure remains in floodplain.	Local, Property Owner	Varies by structure size. Typical cost in study area \$5,000 - \$10,000. Included in the costs of a typical elevation project.	Yes, Activity 530
13	Levee/Wall/Berm for a Single Structure	Construction of a levee or floodwall for a single structure. Generally considered a last option if other alternatives are not feasible.	Moderate - reduces potential for flood damage, but structure remains in floodplain. Failure or overtopping of the levee or floodwall can result in catastrophic damage.	FEMA HMA, Local, Property Owner	Not applicable to study area.	Yes, Activity 530

3.1.2 Programmatic

Programmatic flood risk reduction actions represent planning or policy actions that reduce the risk of flooding damages community wide. Typically, these actions promote awareness of flooding risk, potential mitigation actions for property owners, flood preparedness and flood warning planning, and floodplain management planning and policy. Most of these actions, if implemented, would provide additional CRS point credit to the City, resulting in potential flood insurance discounts for property owners. For more information on the CRS program and flood insurance, see Section 5.

An overview of potential actions is provided in the following Table 5.

3.2 Flood Risk Reduction Recommendations

Each individual property in the group of properties selected for additional review was assessed for potential mitigation action, considering the non-structural mitigation actions identified in Table 4 as well as the flood risk factors reviewed as part of development of the flood risk assessment. For each property, potential recommendations were considered along with relative effectiveness to develop a summary of potential actions for each property. An overview of the summary is provided in Table 6. Highly effective, recommended actions are green; recommended actions are yellow, and actions that are not recommended are red. Certain actions are also identified as needing further evaluation (blue); typically, this is due to lack of data regarding the property relative to the action evaluated. It should also be emphasized that the recommendations are planning level and generally will require further evaluation as a next step; for example, elevation of a structure as a recommendation will require additional information on structural condition to confirm that elevation is possible. If this is not possible, an alternative flood risk reduction action should be considered.

For each property, a primary recommendation was identified based on the review of the flood risk and potential mitigation actions. This primary recommendation was carried through to the next step of evaluation as part of the development of flood mitigation priority scores. An overview of the primary mitigation action recommendations for each evaluated property is provided in Figure 5.

Table 5: Potential Programmatic Actions

Alternative ID	Programmatic Alternative	Description	Potential CRS Benefits
1	Audible Flood Warning System	An audible flood warning system for the most floodprone areas of the community. Implementation can be coordinated with development of a Flood Preparedness and Response Plan.	Yes, Activity 610
2	Public Education	Promote flood risk awareness through the City's website as well as other outreach efforts. These actions can be incorporated into other floodplain management/flood preparedness planning efforts.	Yes, Activity 320 and 330
3	Flood Insurance	Flood insurance as a mitigation action is the easiest way to reduce risk, especially while additional actions are in development. Promotion of flood insurance as a mitigation action will result in more ICC coverage, which can be used to support the cost of mitigation if flood damage occurs again.	Yes, Activity 370
4	CRS Program Participation - Floodplain Management Plan	The City of Fremont currently participates in the NFIP's Community Rating System. The City has completed a Repetitive Loss Area Analysis (RLAA); this could be supplemented with a community wide floodplain management plan. This plan can incorporate existing planning tools such as the RLAA, this flood risk reduction plan, and the Hazard Mitigation Plan along with planning team coordination to develop a comprehensive floodplain management plan.	Yes, Activity 510
5	Flood Preparedness and Response Plan	The purpose of this plan is to develop a community wide response plan in the event of another significant flood. The planning process helps the community identify key contacts, and determine the best approach to respond to flooding, including prioritizing actions taken before and during the flood.	Yes, Activity 610
6	Flood Study Updates	The effective flood study for Fremont uses older analysis techniques, and would also benefit from incorporation of flood data obtained as a result of the March 2019 flood. This action would develop revised flood studies for use as part of other programmatic actions and to promote risk informed decision making.	Yes, Activity 410
7	Floodplain Management Policy Revisions - Planning and Zoning/Comprehensive Planning	This activity involves a comprehensive review of floodplain management requirements and potential adoption of higher standards. This also involves integration of floodplain management into the comprehensive plan. This can be incorporated with a floodplain management planning effort, if applicable.	Yes, Activity 430
8	Natural Resource Protection/Recreation	This activity involves identifying and maintaining open space to support the natural and beneficial functions of the floodplain. This can involve both open space preservation as well as comprehensive planning to coordinate this effort with natural floodplain functions.	Yes, Activity 420 and 510

Table 6: Potential Mitigation Actions

Address	Property Acquisition and Structure Demolition	Structure Demolition and Rebuild (Mitigation Reconstruction)	Property Acquisition and Structure Relocation	Property Acquisition, Demolition or Relocation, and Re-sale	Structure Elevation	Abandon Basement and Fill	Dry Floodproofing of Structures	Wet Floodproofing of Structures	Levee/Floodwall Protection for Multiple Structures	Utility Elevation/Backflow prevention	Partial Dry Floodproofing	Partial Wet Floodproofing	Levee/Wall/Berm for a Single Structure
6590 E MILITARY AVE													
6676 E MILITARY AVE													
6750 E MILITARY AVE													
6848 E MILITARY AVE													
6940 E MILITARY AVE													
720 BOULEVARD ST #17													
720 BOULEVARD ST #15													
720 BOULEVARD ST #25													
706 S UNION													
623 SCHURMAN													
570 TREAT													
240 W WASHINGTON													
449 S BROAD													
315 W JENSEN													
321 S H													
331 S H													
310 - 312 W JACKSON													
120 SCHUYLER													
140 PERSHING RD													
130 PERSHING													
3213 BIG ISLAND RD													
3195 BIG ISLAND RD													
3195 BIG ISLAND RD													
2995 BIG ISLAND RD													
3001 BIG ISLAND RD													
2985 BIG ISLAND RD													
2451 BIG ISLAND RD													
2696 BIG ISLAND RD													
2570 BIG ISLAND RD													
641 W JACKSON													
635 W JACKSON													
625 W JACKSON													
615 W JACKSON													
405 S K													
549 W JACKSON													
529 W JACKSON													
511 W JACKSON													
405 S NYE													
410 S NYE													
425 W JACKSON													
433 W JACKSON													
338 N PIERCE													
324 N PIERCE													
308 N PIERCE													
339 N PIERCE													
250 N PIERCE													
335 N PIERCE													
240 N PIERCE													
325 N PIERCE													
206 N PIERCE													
315 N PIERCE													
1104 W 2ND													
303 N PIERCE													
219 CROSBY													
253 N PIERCE													
229 CROSBY													
225 N PIERCE													
249 CROSBY													
205 N PIERCE													
259 CROSBY													
309 CROSBY													
305 N CROSBY ST													
345 CROSBY													
335 N CROSBY ST													
1105 W 1ST ST													
149 N MORRELL													
135 N MORRELL													
1049 W 1ST													
127 N MORRELL													
1043 W 1ST ST													
125 N MORRELL													
1015 W 1ST ST													
115 N MORRELL													
105 S MORRELL													
105 N MORRELL													
150 N MORRELL ST													
905 W 1ST													
240 N MORRELL													
915 W 1ST													
124 N MORRELL													
929 W 1ST													
949 W 1ST													

Alternative Key
Highly Effective, Recommended
Effective
Not Recommended
Further Evaluation Needed
N/A (incomplete data)

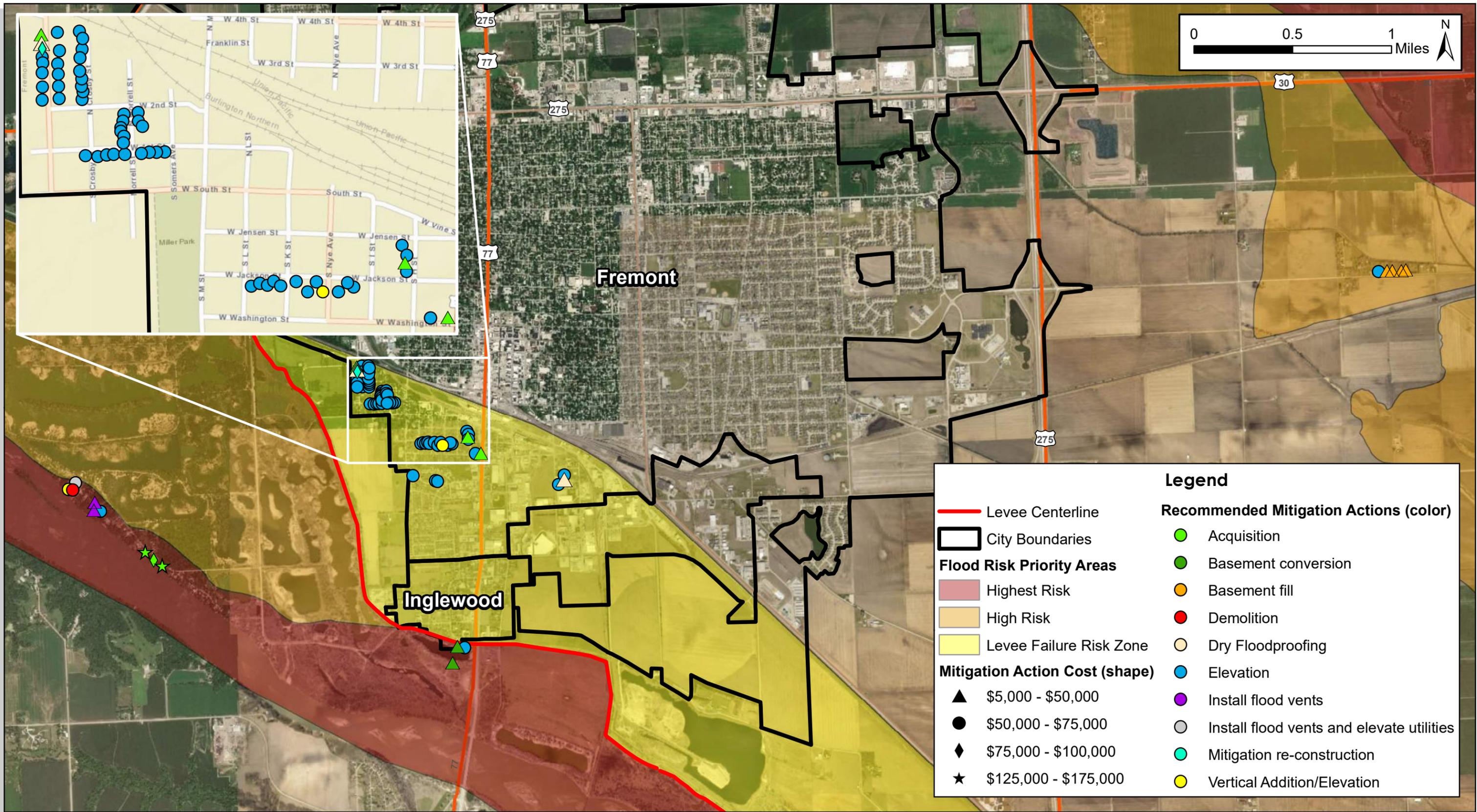


Figure 5: Primary Mitigation Action Recommendations

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4 FLOOD MITIGATION PRIORITY SCORES

Flood mitigation priority scores are used to further prioritize flood risk reduction actions by determining how these actions provide additional benefits such as impact beyond minimum flood risk reduction objectives.

4.1 Scoring Approach

A scoring system similar to the flood risk property scores was developed to determine flood mitigation priority scores. However, in contrast to the flood risk property scores, the priority scores are used to determine which properties are highest priority to take mitigation action on based on specific property and mitigation action characteristics. Factors considered include but are not limited to benefits to repetitively flooded properties and proximity to other mitigation projects. This information can then be used to further differentiate projects. For example, if a property is repetitive loss, a mitigation action has higher priority than a similar action for a non-repetitive loss property. An overview of the factors considered, and point values assigned is provided in Table 7.

For any individual property, the maximum score is 500 points. A multiplier is determined based on the number of points assigned divided by 500; this is then multiplied by the Flood Risk Property Score to get the final Flood Mitigation Property Score. A higher multiplier indicates that the factors considered result in the property being a higher priority for mitigation action. When combined with the Flood Risk Property Score, the higher a resulting Flood Mitigation Property Score the higher priority the property is overall to mitigate.

4.2 Scoring Results

Results of the scoring are provided on the following Figures 6 and 7. The final Flood Mitigation Property Scores on Figure 7 indicate the overall combination of the Flood Risk Property Score, recommended mitigation action, and Flood Mitigation Priority Score and can be used to set relative priority for mitigation action decision purposes. The higher the score, the higher priority the property is to mitigate considering the flood risk and effectiveness of the recommended flood risk reduction action. The final score for each property is heavily driven by relative flood risk and potential for impacts, with additional considerations accounted for as noted using the Flood Mitigation Priority Score multiplier.

Table 7: Flood Mitigation Priority Scoring

Factor	Points	Criteria	Applicable Mitigation Actions
Life and human safety	80	Project involves the permanent removal of habitable structure from flood hazard area.	Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Property Acquisition, Demolition/Relocation, and Re-sale
Relative cost effectiveness	80 40 0	Very cost effective - Mitigation action meets automatic BC threshold for HMA grants and will provide significant risk reduction for a cost lower than the cost to acquire the property. Moderately cost effective - Mitigation action is effective at reducing risk and flood insurance costs but does not meet the automatic BC threshold for HMA grants or will not provide significant risk reduction for a cost lower than the cost to acquire the property. Undetermined or not cost effective	Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Property Acquisition, Demolition/Relocation, and Re-sale Structure Elevation Dry Floodproofing of Structures Wet Floodproofing of Structures
Proximity to other mitigation projects	65	Project is located adjacent to other previously implemented or planned mitigation projects	Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Property Acquisition, Demolition/Relocation, and Re-sale Structure Elevation
Property recently added to floodplain with prior floodplain map revision	50	Property was not located in a mapped floodplain at the time of purchase by current owner	Any
Repetitive loss structure	50 50 0	Severe Repetitive Loss Structure or Repetitive Loss Structure N/A	Any
Property adjacent to publicly owned land	25	Property touches publicly owned land	Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Property Acquisition, Demolition/Relocation, and Re-sale
Natural Resource protection benefits/recreation access	50	Property has or is adjacent to naturally beneficial areas, or provides recreation access.	Property Acquisition and Structure Demolition Property Acquisition and Structure Relocation Property Acquisition, Demolition/Relocation, and Re-sale
Historic preservation and cultural asset protection	20	Property includes historic structure(s) or is in proximity to areas of historic or cultural significance	Any
Other	80 40 0	High Medium Low	Any

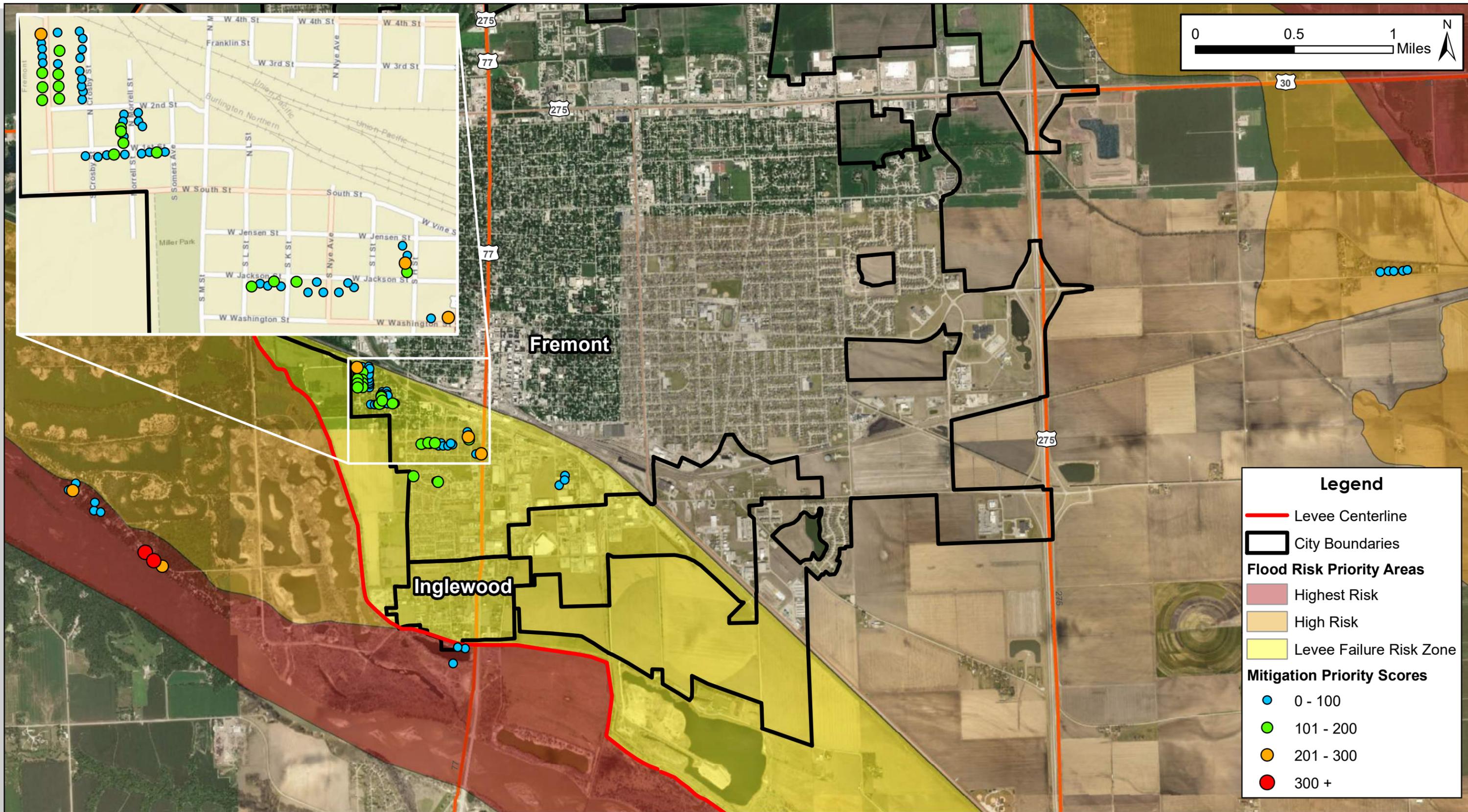


Figure 6: Flood Mitigation Priority Scores

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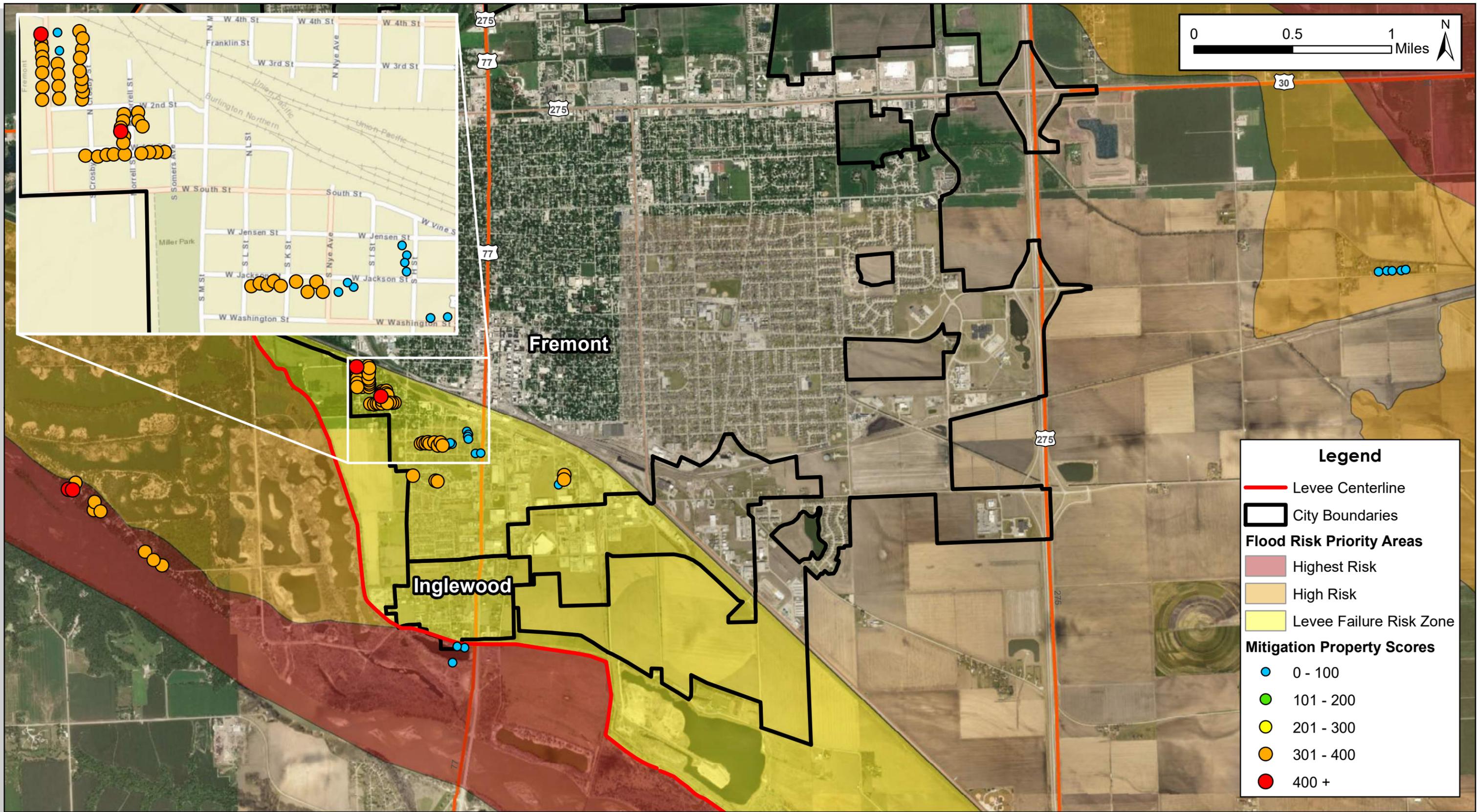


Figure 7: Flood Mitigation Property Scores

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5 FLOOD INSURANCE AND THE COMMUNITY RATING SYSTEM (CRS)

Flood insurance is an essential mitigation action and it is recommended that all property owners within flood risk areas in the community obtain flood insurance whether required or not. While flood insurance is legally required for property with a federally backed mortgage, it is available to all property owners in Fremont as a result of the community's participation in the National Flood Insurance Program. By covering a property through both structure and contents coverage, property owners can both have protection from the financial consequences of flooding and be covered by the Increased Cost of Compliance (ICC) provision of flood insurance policies, which will provide funding for certain flood risk reduction projects in the event the covered structure is substantially damaged (damage exceeding 50% of the pre-damage market value) in a future flood. According to the Fremont RLAA developed by NeDNR in 2014, at the time Fremont had 1,050 flood insurance policies with \$150 million of insurance coverage in force. At the time over 200 claims had been made and around \$1.5 million paid to policy holders. In contrast, as of July 31, 2019 (best publicly available data) total policies and coverage had decreased to 820 and about \$130 million, respectively – however, total losses had increased to just under 500 with almost \$7.0 million in claims paid. This drastic increase is certainly due to the significant flooding event of March 2019 and likely does not capture the details of all related claims. Also, an unknown number of properties were likely not covered by flood insurance during the March 2019 flood and may remain without flood insurance coverage.

Based on current conditions of the floodprone properties evaluated for this assessment, JEO completed a planning level evaluation of current flood insurance costs to those properties now compared with what the cost will be once mitigated according to the primary mitigation action recommendation. This assessment is approximate as it depends on a number of assumptions including the level of coverage for structure and contents. For the purposes of this evaluation, it was assumed that the existing properties are generally rated as Pre-FIRM, which means they were either constructed before 8/15/1978 or before being shown in the floodplain as shown on the effective FIRM dated 1/2/2008. It was also assumed the coverage level is 80% of the assessed value and \$20,000 in contents coverage. Pre-FIRM rating is currently a subsidized rating option, meaning it costs less than the actuarial, or elevation-based rate. For properties that have a floor lower than the base flood elevation, elevation rating will result in a much higher rate than the Pre-FIRM rate. For proposed conditions, it was assumed the primary structure on the property is either elevated one foot above the base flood elevation or floodproofed to two feet above the base flood elevation. Based on these assumptions and using elevation-based rates, the benefits of mitigation for just the assessed properties is approximately \$30,000 - \$40,000 per year in lower premiums which is approximately \$900,000 - \$1.2 million dollars in premium savings over a 30-year period. Assuming flood mitigation through elevation is completed for all properties in the levee failure risk priority area alone, this would result in a potential premium savings of XXX assuming a savings of approximately \$400.00/property/year. It is worth noting that the significance of the premium difference is impacted by the subsidized rating structure of Pre-FIRM policy rates; these rates are anticipated to transition to full risk (elevation based) rates in the future, which will result in a more significant benefit for elevation projects that both reduce flood damage risk and flood insurance rates.

Currently the NFIP is moving towards a new rating structure called Risk Rating 2.0, which is anticipated to be implemented on October 1, 2021. While full details have not been released, this flood insurance rating structure is anticipated to take into account distance from the flooding source along with depth and frequency of flooding. Likely this could result in higher flood insurance rates for the highest risk properties, such as the properties in the floodway/highest flood risk priority areas of Fremont. Under Risk Rating 2.0,

it is anticipated that mitigation actions such as elevation of structures, wet floodproofing, and elevating utilities will be credited with flood insurance cost reductions, similar to the current rating structure. The overall rating structure is anticipated to put a focus on reducing flood damage risk to properties that are in the highest risk areas such as high velocity or high flood depth regions of the floodplain. By taking mitigation action now, property owners can avoid potentially significant future flood insurance cost increases.

As previously noted, the community participates in the NFIP's CRS program. Through this program, the community receives flood insurance discounts for floodplain management related activities and policies the community implements. Fremont is currently a Class 8 and receives a 10% flood insurance discount for all property owners in the community.

However, there are several other activities Fremont could implement to obtain more points, including the mitigation actions outlined in this assessment. Based on a review of potential activities and points Fremont could obtain it appears likely Fremont could move to a Class 6 (20% flood insurance discount). Based on a current written premium of approximately \$700,000 community wide, moving to a Class 6 would result in an annual flood insurance savings of approximately \$70,000. This annual savings could translate to \$2.1 million or more in savings over a 30-year period.

6 RELATED STUDIES AND FLOOD RISK REDUCTION PROJECTS

In addition to performing routine floodplain management through participation in the NFIP and additional activities through the NFIP's CRS program, the City of Fremont continues to pursue multiple floodplain management and flood risk reduction actions that collectively will reduce the risk of flooding and potential damages from flooding for Fremont property owners. A summary of these historical and ongoing actions is provided in Table 8. An overview of these projects for the areas covered by this parcel level mitigation action assessment is also shown on Figure 8.

Table 8: Related Plans and Studies

Action	Timeline	Objective	Outcome
Repetitive Loss Area Analysis (RLAA)	2014	Identify potential flood risk reduction actions for the repetitive loss properties within the City of Fremont.	The RLAA was adopted by the City of Fremont and points received through the CRS program which helped the City achieve a class change. This helped reduce flood insurance premiums by 5% for property owners. The City is considering potential flood risk reduction actions as part of reducing flood risk for these properties considering the impacts of the March 2019 flooding.
Hazard Mitigation Grant Program (HMGP) Application	Ongoing	Grant application being prepared by the City of Fremont to be submitted to NEMA. The purpose of the application is to take immediate	If the application is approved by NEMA and FEMA, it is anticipated this will result in elevation or retrofitting of multiple structures using the grant funds.
Levee Evaluation	Ongoing	Evaluate the Fremont, Farmland, and Railroad levee for the purposes of the levee system joining the U. S. Army Corps of Engineers Public Law 84-99 Rehabilitation and Inspection Program.	Recommendations for improvement to the levee necessary to join the PL 84-99 program. If the program is successfully joined, USACE will provide rehabilitation and inspection assistance for the levee system under the rules of the program.
U.S. Army Corps of Engineers Section 205 Project	Ongoing	Identify potential flood risk reduction actions for selected floodprone properties within the City of Fremont.	USACE has completed a draft assessment of the identified properties. Within the Platte River floodplain, a number of properties have been identified for potential elevation (residential) or floodproofing (non-residential).
Platte River Corridor Evaluation	Possible Future Project	The City of Fremont has joined with the Dodge County Area Joint Water Management Advisory Board to seek funding to evaluate flood risk for a longer reach of the Platte River, including the reach from North Bend to Fremont. The coverage area would also include Rawhide Creek and local drainage ditches in the region of Fremont.	Additional flood modeling, prioritization, and development of flood risk reduction actions for the City of Fremont, Dodge County, and surrounding communities. An overarching goal of this effort is to ensure that further identification and prioritization of structural and non-structural mitigation actions is informed by stakeholder input and the best available flood risk modeling. It is also a goal of this effort that any proposed structural actions do not result in unintended impacts.
Local Drainage Evaluations	Possible Future Project	the Platte River Corridor Evaluation, the City may elect to separately evaluate the Rawhide Creek corridor and ditches and/or localized drainage	Flood modeling and mitigation action identification for the identified study area.

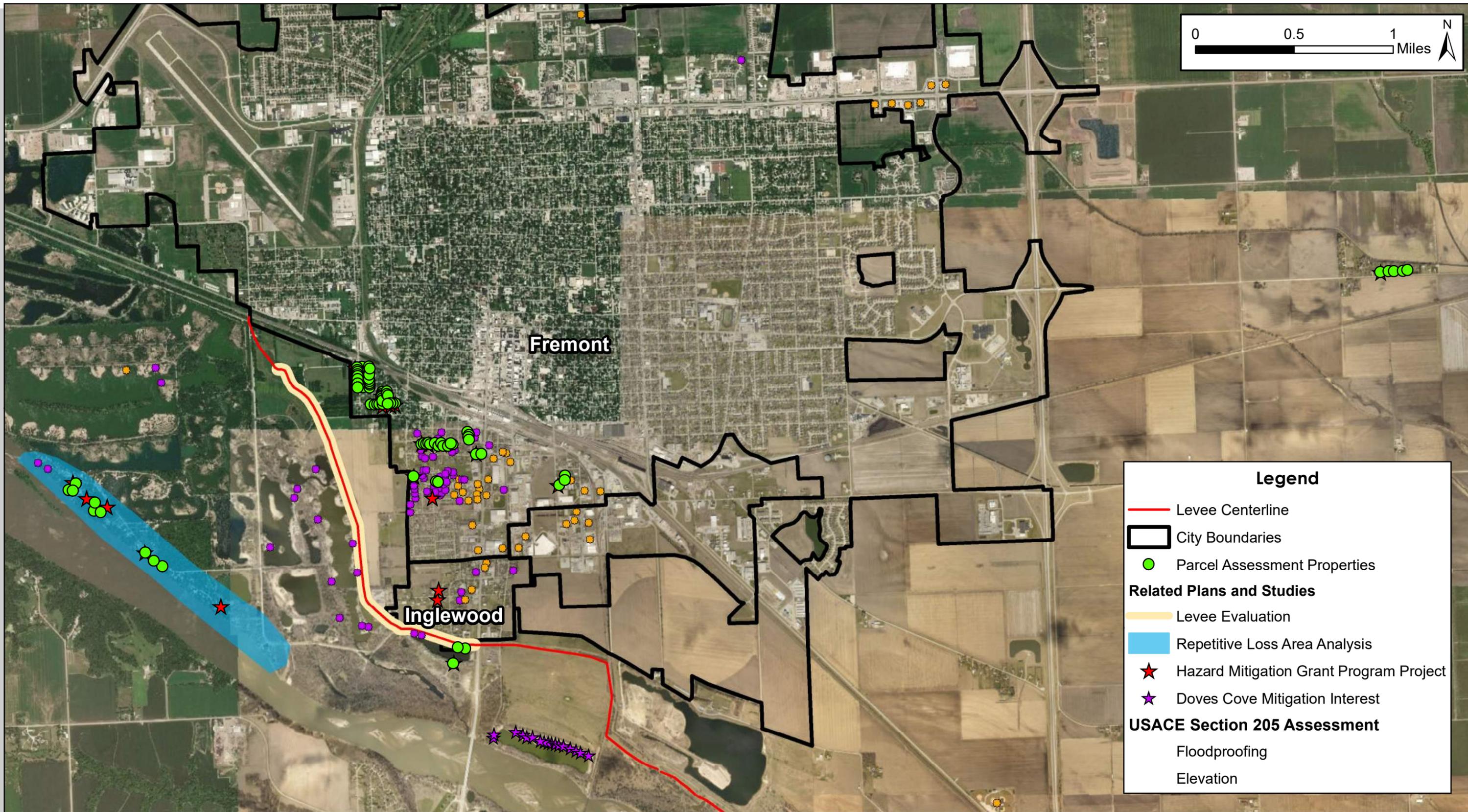


Figure 8: Related Plans and Studies

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7 RECOMMENDED FLOOD RISK REDUCTION ACTIONS PRIORITY

Based on the findings of the parcel assessment and a review of recent and ongoing flood risk reduction mitigation actions to date, recommendations have been developed to promote flood risk reduction action by property owners within Fremont. The recommendations are reflected in the flood mitigation property scores shown on Figure 7 as well as the content of Tables 4, 5, and 6. A summary of these recommendations in priority order are:

1. Continue pursuit of a flood risk reduction mitigation action strategy program through FEMA Hazard Mitigation Assistance funding sources, starting with the HMGP program application that is in development. Mitigation actions should focus generally on potential acquisition of floodprone properties or elevation of floodprone structures.
 - a. First priority should be placed on structures in the highest risk Flood Risk Priority Area, which generally includes the floodway. Additional priority should be placed on repetitively flooded or substantially damaged structures in these areas. These actions would be consistent with the Fremont RLAA and associated recommendations.
 - b. The City should consider acquisition and removal or acquisition and re-development for low value structures within the assessment area.
 - c. USACE Section 205 funding may be able to supplement the mitigation strategy.
2. The City should consider incorporating all ongoing flood risk reduction efforts into a comprehensive long-term flood risk mitigation and recovery plan. Doing this will allow for consistent and prioritized coordination of outcomes of all activities over the long term, resulting in the optimum flood risk reduction action implementation process for the City. Completing this plan will also likely improve the City's CRS class. Additionally, Economic Development Administration (EDA) funds can potentially be used for development of this plan.
3. The City should consider development of a Flood Preparedness and Response Plan, to include the potential for development of a more robust flood warning system and flood warning procedures.
4. The City should continue participating on the NFIP's community rating system and consider evaluation of alternatives to increase public education regarding flooding and promotion of flood insurance that will also improve the City's CRS class. Along with these efforts the City should evaluate ongoing or potential activities that will result in a CRS class improvement and associated flood insurance cost reductions for community property owners.
5. The City should continue evaluation of the Fremont, Farm, and Railroad levee and consider results of the evaluation within the overall flood risk reduction action plan for the City. Levee emergency preparedness operations should be incorporated into the Flood Preparedness and Response Plan.

8 FUNDING

Given the significant costs to potentially implement large scale flood risk reduction projects such as those presented in these recommendations, the Village should seek additional funding support beyond the general budget. Several potential funding options are summarized below, generally in order of complexity and effort needed to procure funding.

8.1 Lower Platte North NRD

Historically, the LPNRD has assisted communities within the NRD with flood risk reduction improvements as well as flood risk reduction planning. A typical cost share has ranged from 25-50% of project costs and may or may not include cost share assistance for engineering studies and design related to the projects. The NRD's ability to cost share on any specific project may vary based on other NRD project priorities and available funding year to year. Because of this, it is recommended that the City initiate discussions with the LPNRD regarding cost share opportunities and feasibility as soon as possible if the City wishes to pursue one or more potential projects.

8.2 CDBG

Under the CDBG Program, DED has several funding categories to address housing, downtown revitalization, water and wastewater, public works, planning, and economic development. One such category is Emergent Threat (EM). The purpose of the EM Category is to assist communities with situations that pose a serious and immediate threat to public health, safety, or welfare. Priority is given to those projects that are meeting the emergent threat criteria. All activities proposed in applications for CDBG funding in the EM Category must meet the national objective of benefitting low-and moderate- income persons (through the subcategories LMI Area Benefit and LMI Limited Clientele), aid in the prevention or elimination of slums or blight in either an area (SBA) or spot basis (SBS), and/or through urgent need (UN). The City's low- and moderate-income (LMI) percentage is XX (American Community Survey 5-Year Estimate 2011-2015), therefore, the City will need to apply for this funding using the CDBG National Objective of preventing or eliminating of slum and blight or urgent need. Respondent to the current threats associated with disaster declarations throughout the state, this category also allows for the State and communities to respond to and address emergent issues and needs as they are identified. Given disaster is transitory in nature and future events likely, application must identify the cause of the situation, such as: flooding, tornado, fire, or other natural or man-made disaster.

On December 4, 2019, Governor Ricketts issued a news release announcing that the U.S Department of Housing and Urban Development (HUD) awarded the State of Nebraska \$108.9 million to aid Nebraska in its long-term disaster recovery efforts. The rules, policies, and application guidelines governing this supplemental allocation of CDBG funds are expected to be released in the Spring 2020. Fremont should consider this funding source for flood risk reduction improvements, once available.

8.3 Economic Development Administration (EDA)

EDA funding can be utilized to help communities recover from disasters such as the March 2019 flooding. The highest potential for funding through this program is for actions that will promote economic development and job creation. Potentially eligible activities relevant to the City of Fremont include restoration or enhancement of damaged infrastructure such as the levee system; disaster resilience, mitigation, and recovery planning; and industry diversification/economic re-development. The City could consider EDA funding for a number of potential planning and recovery actions, including potential re-development of the levee protected area.

8.4 FEMA Hazard Mitigation Assistance

FEMA Hazard Mitigation Assistance funding opportunities include Flood Mitigation Assistance (FMA), Pre-Disaster Mitigation Assistance (PDM), and Hazard Mitigation Grant Program (HMGP) opportunities. FMA and PDM are annual grant funding opportunities that are nationally competitive, while HMGP funding is

associated with post-disaster circumstances and therefore is variable, although funding is state specific. FMA is administered by NeDNR and PDM and HMGP are administered by NEMA While project eligibility and approval criteria are similar across each grant program, certain programs carry additional stipulations. For example, FMA will not fund levee improvements. Obtaining funding through these programs requires a detailed application process and must meet cost-benefit requirements.

For a summary of potential grants and eligibility by project, see Table 9 below.

Table 9: Funding Alternatives Summary

	Potential Funding Sources					
Priority 1 - Acquisition and Elevation Projects	LPNRD	FEMA HMA	CDBG - EM	EDA	USACE	Local
Priority 2 - Flood Preparedness and Response Plan	LPNRD	FEMA HMA	CDBG - EM	EDA		Local
Priority 3 - Flood Preparedness and Response Plan	LPNRD	FEMA HMA ¹	CDBG - EM	EDA		Local
Priority 4 - Public Outreach and CRS Class Improvement	LPNRD					Local
Priority 5 - Levee Evaluation and Associated Risk Reduction Actions	LPNRD	FEMA HMA	CDBG - EM	EDA		Local
¹ FEMA HMA funding may be more difficult to attain for a Flood Preparedness Plan based on recent attempts to fund similar plans around the state.						

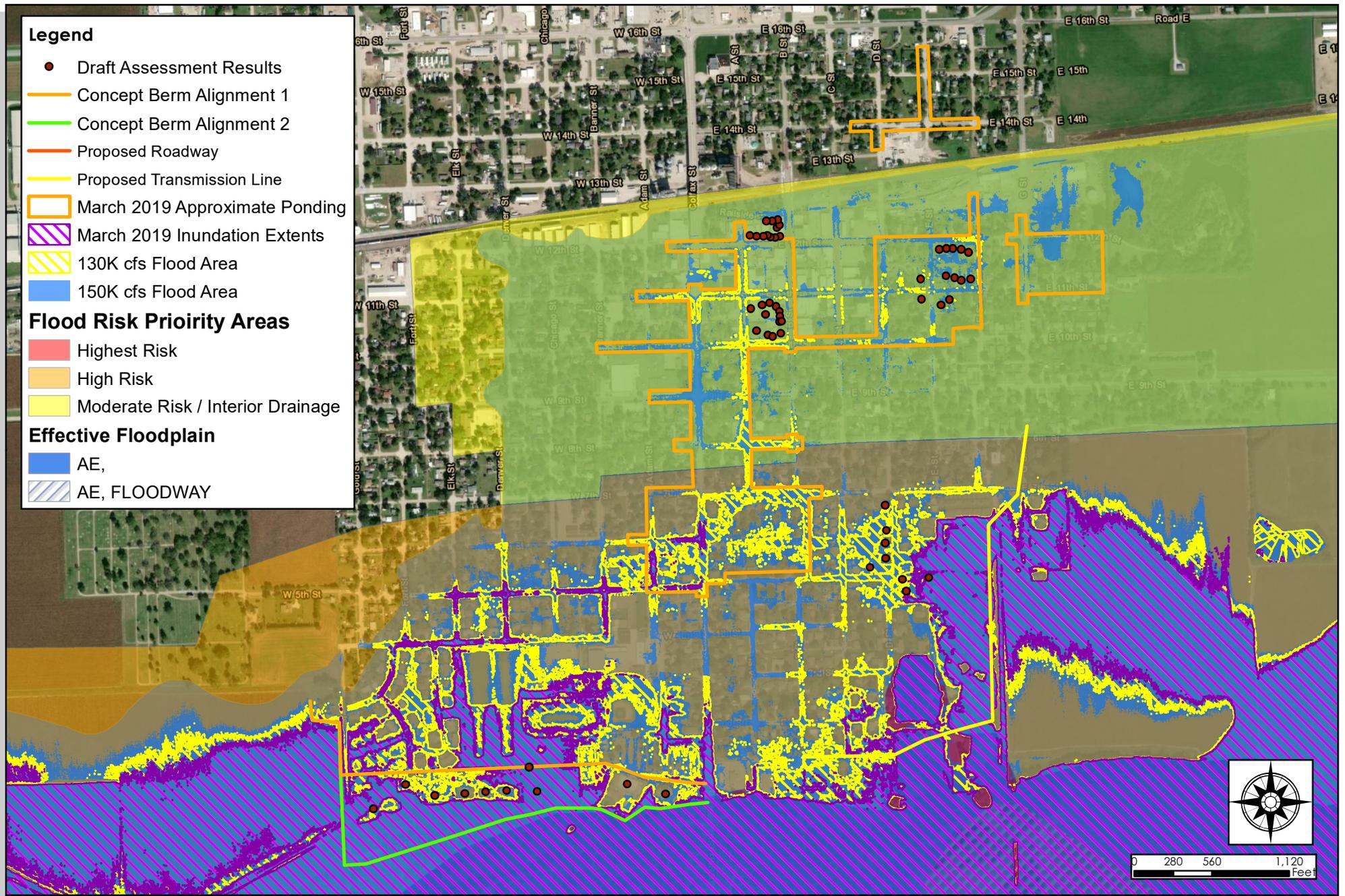
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APPENDIX A –

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APPENDIX B –

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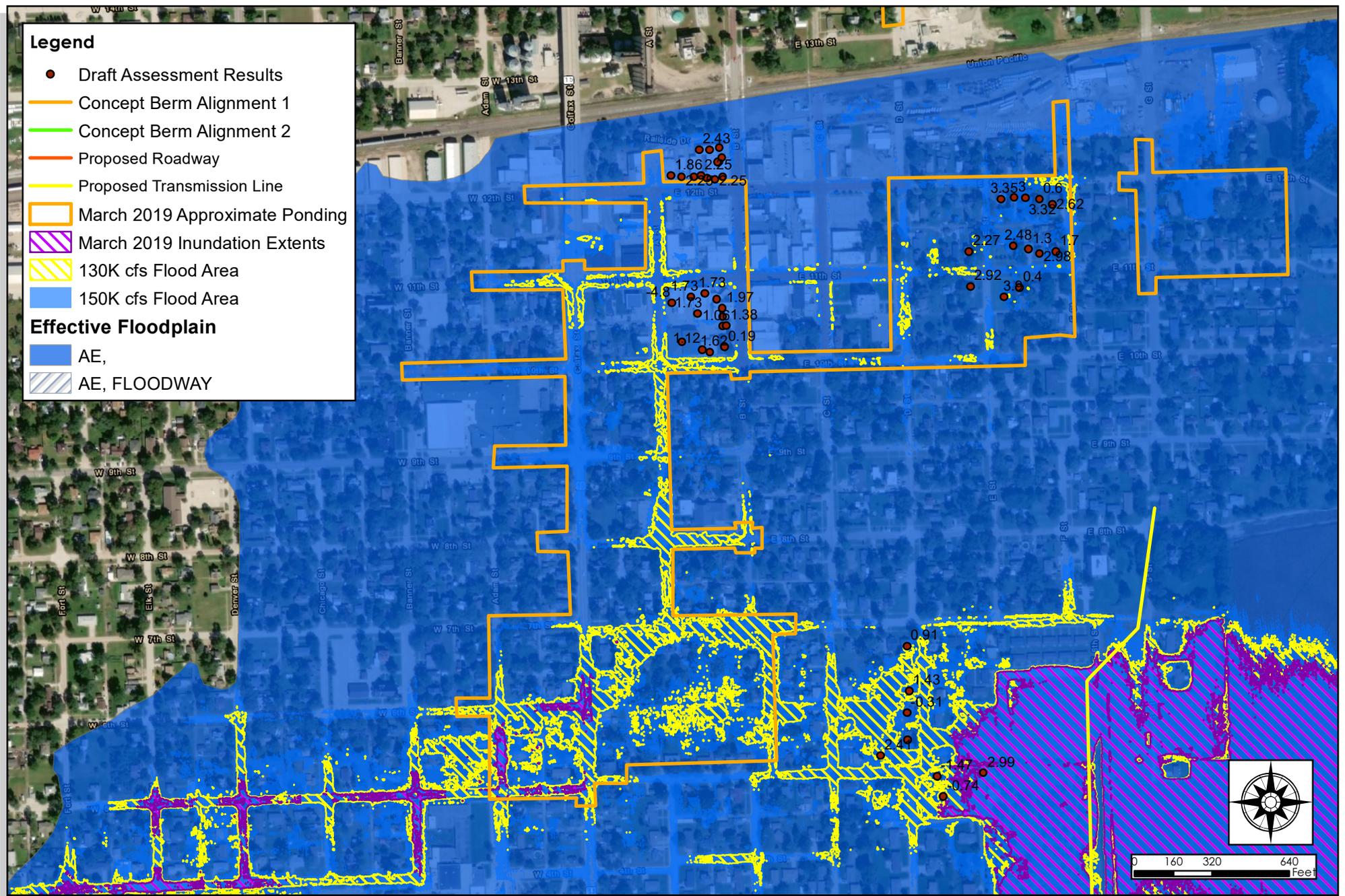
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Schuyler Parcel Assessment Overview

Schuyler, Nebraska

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Schuyler Parcel Assessment - Depths of Flooding (Effective FIRM)

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Schuyler, Nebraska

