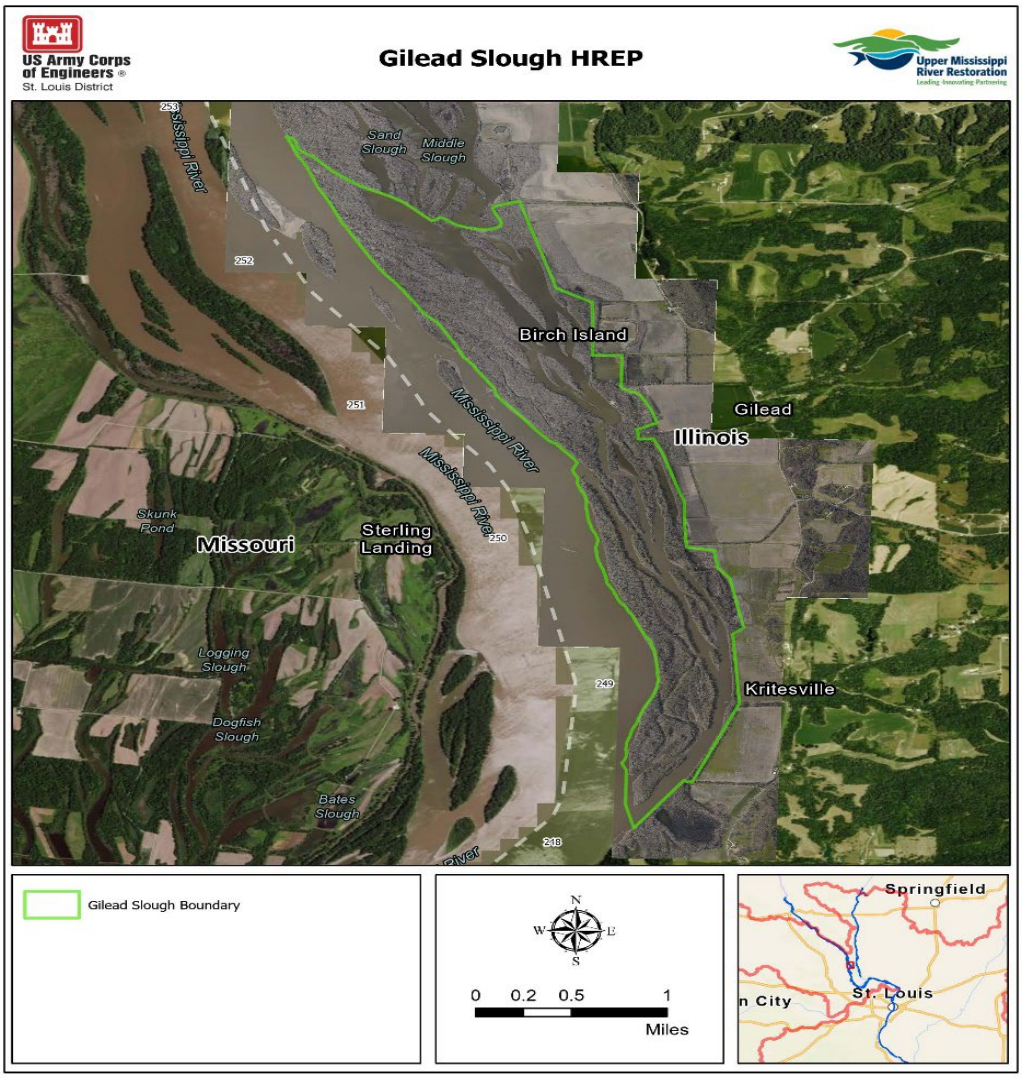
# UPPER MISSISSIPPI RIVER RESTORATION

# FEASIBILITY REPORT
# WITH INTEGRATED ENVIRONMENTAL ASSESSMENT

## GILEAD SLOUGH
## HABITAT REHABILITATION AND ENHANCEMENT PROJECT
## NEPA ID#: EAXX-202-00-B3P-1759826212

## POOL 25, UPPER MISSISSIPPI RIVER MILES 253-248
## CALHOUN COUNTY, IL




*Appendix I: Real Estate*

**January 2026**
Draft Version

US Army Corps of Engineers
St. Louis District

Upper Mississippi River Restoration
Leading · Innovating · Partnering

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# 1. Purpose

This Real Estate Plan (REP) has been prepared to present the real estate requirements required to support the Integrated Feasibility Report with environmental assessment (EA), including the Finding of No Significant Impact (FONSI). The project purpose is to rehabilitate and enhance the study area through construction of measures that will maintain, enhance, and restore backwaters, side channels, emergent wetlands, sandbars, and island habitats

## 1.1 Project Area

The Upper Mississippi River Restoration (UMRR) Gilead Slough HREP consists of approximately 1,200 acres of backwater, wetland, side channel, sandbar, island, and floodplain forest areas. The study area is located on the left descending bank of the Mississippi River between river miles (RM) 253 - 248, approximately five miles north-northwest of Batchtown, Illinois. The study area is located within Calhoun County, Illinois on federally owned lands, managed by the U.S. Fish and Wildlife Service (USFWS) under a cooperative agreement with USACE as part of the General Plan (GP) lands agreement. The study area is located in Pool 25 within the Lower Impounded Cluster as identified by the HNA-II. Figure 1 provides a project vicinity map for the Gilead Slough HREP.

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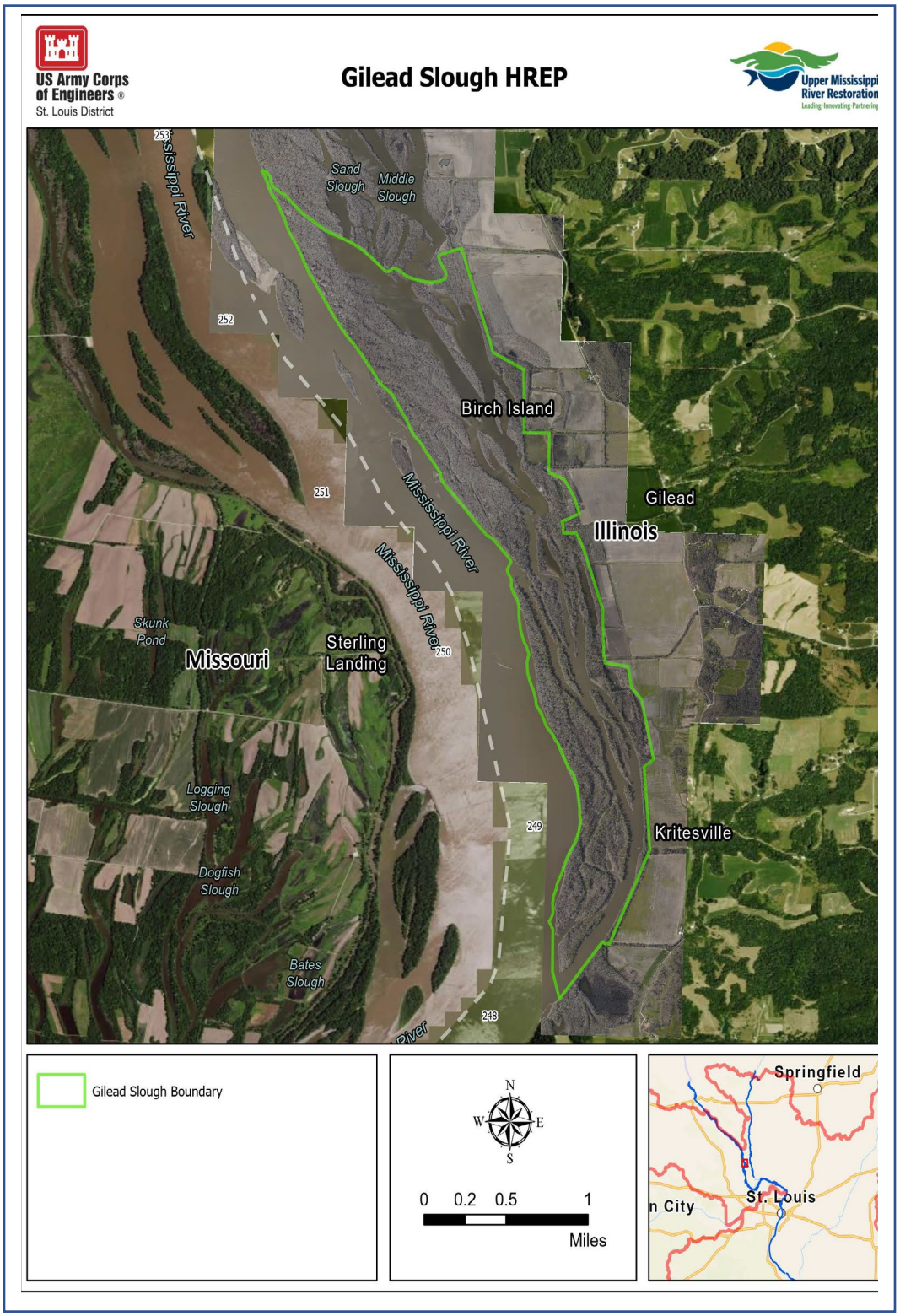


*Figure 1: Project Vicinity Map*

## 1.2 Authority

The Upper Mississippi River Restoration (UMRR) program was originally authorized by the Water Resources Development Act (WRDA) of 1986 under Section 1103 (33 U.S.C. 2201 et seq.; P.L. 99-662, 1986). The UMRR program is composed of two elements: (1) plan, construct, and evaluate measures for fish and wildlife habitat improvement through HREPs, and (2) monitor the natural resources of the river system through the Long-Term Resource Monitoring (LTRM) element. It is a regional program that includes the USACE St. Paul, Rock Island, and St. Louis Districts.

Interagency groups in each District identify, prioritize, and select the HREPs. Field managers from the aforementioned interagency groups determine the areas that have degraded aquatic, wetland, and bottomland forest habitats and which UMRR authorized objectives are priority for the area. After considering resource needs and deficiencies pool by pool, the River Resources Action Team – Technical Section (RRAT-Tech) and the River Resources Action Team – Executive Team (RRAT) supported and recommended the Project as providing substantial significant aquatic, wetland, and floodplain benefits with opportunities for habitat enhancement. The Mississippi Valley Division (MVD) approved the Fact Sheet on 01 October 2020.

Participants in the planning of the Project included St. Louis District and Regional Planning and Environment Division North (RPEDN) staff, and the Project Sponsor. Under Federal regulations governing the implementation of NEPA, the U.S. Fish and Wildlife Service (USFWS) is a cooperating agency. Development of this FR/EA was actively coordinated with the participants during PDT meetings, phone conversations, and on-site visits to the study area.

All project measures would be located within the lands and waters of the United States, are federally owned, and are managed by the USFWS. As such, project first cost funding for restoration measures would be 100 percent federal; responsibility for the operation, maintenance, rehabilitation, replacement, and repair of the project would be the responsibility the USFWS depending on the specific location of project features.

# 2. Lands, Easements and Rights-of-way (LER)

The Tentatively Selected Plan (TSP; Plan) for the Gilead Slough HREP (Intermediate Habitat Benefit Alternative) will take place on within the lands and waters of the United States, are federally owned and are managed by the U.S. Fish and Wildlife Services. areas under Navigational Servitude. It consists of multiple measures to restore and improve the aquatic ecosystem structure and function by implementation of the following:

- Shoreline Protection with GSR
- Excavation At Varying Depths
- Moist Soil Unit Creation with Overflow (Passive Management)

- Scour Structures
- Hard Points
- Backwater Excavation (EPM)
- Island/Sandbar Creation
- Barbs
- Bank Protection
- Substrate Diversity

The Plan was identified as the National Environmental Restoration (NER) Plan. For ecosystem restoration projects, the plan that maximizes ecosystem benefits compared to costs is selected as the NER Plan. The Plan is a best buy alternative that yields 197 net average annual habitat units (AAHUs) at an average cost of $4,663 per AAHU (FY2025 price level; FY2025 federal discount rate of 3%, 50-year period of analysis). It best meets the study objectives and has sponsor support from the USFWS. Implementation of the Plan would increase the quality and quantity of ecosystem resources and meet the needs for a large variety of native aquatic species. The project outputs are also consistent with the goals and objectives of the Upper Mississippi River Restoration (UMRR) Program.

All project measures would be located within the lands and waters of the United States, are federally owned, and are managed by the USFWS. As such, project first cost funding for restoration measures would be 100 percent federal; responsibility for the operation, maintenance, rehabilitation, replacement, and repair of the project would be the responsibility the USFWS depending on the specific location of project features.

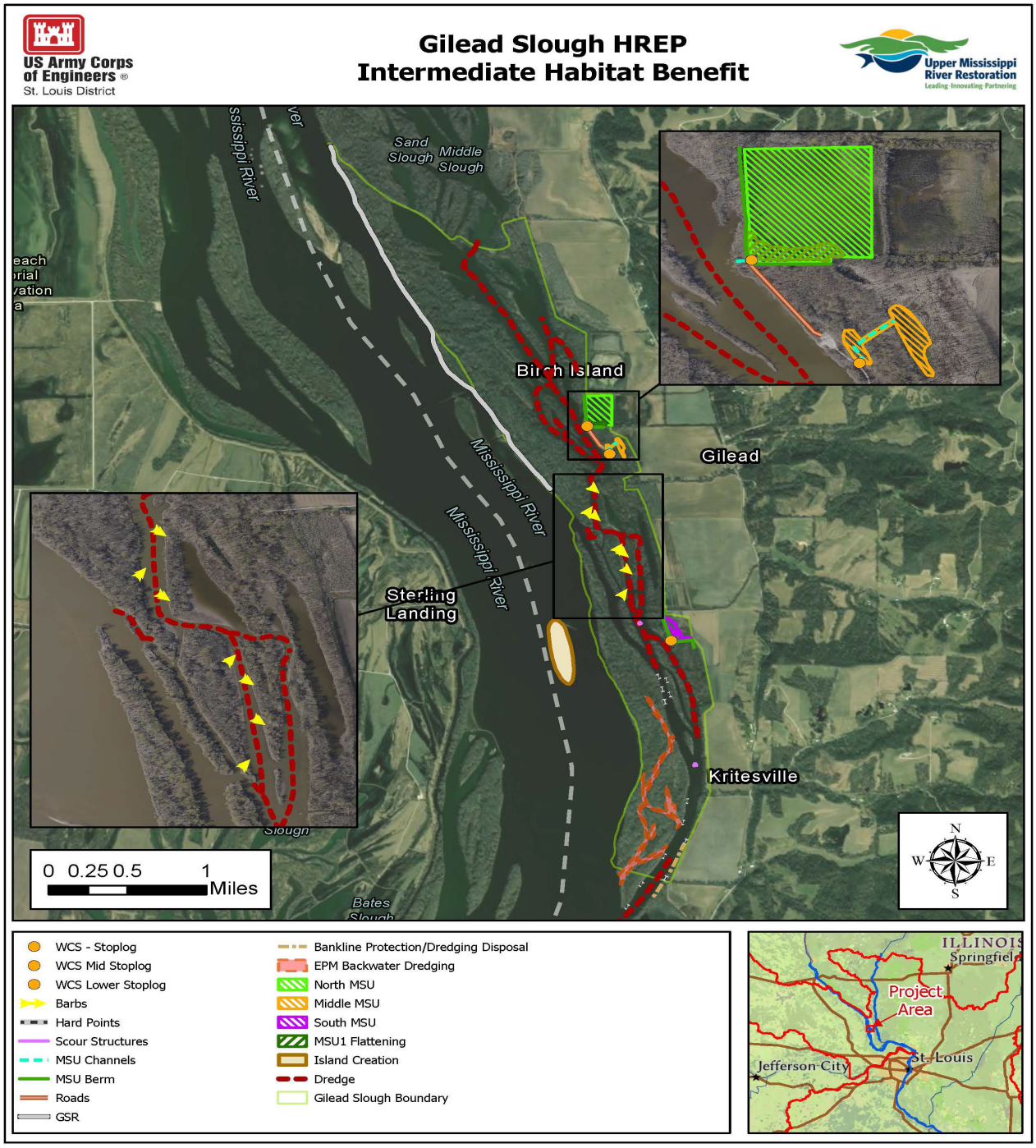


*Figure 2: Tentatively Selected Plan*

| PROPERTY ID CODE | USACE TRACT NO. | RPUID | ORG_CODE | ESTATE |
|---|---|---|---|---|
| CAC25-5851 | C-257 | 824818 | MVS | Fee Simple |
| CAC25-5852 | C-256 | 824817 | MVS | Fee Simple |
| CAC25-5847 | C-251 | 824622 | MVS | Fee Simple |
| CAC25-5850 | C-255 | 824816 | MVS | Fee Simple |
| CAC25-5853 | C-258 | 824819 | MVS | Fee Simple |
| CAC25-5854 | C-259 | 824820 | MVS | Fee Simple |

*Table 1: Tracts managed by the US Army Corps of Engineers*

## 3. Sponsor-Owned LER

The Federal Sponsor for this project is the U.S. Fish and Wildlife Service on lands managed by USACE and owned by the United States of America.

## 4. Non-Standard Estates

No non-standard estates are required for implementation of this Project.

## 5. Existing Federal Projects

Navigation and Ecosystem Sustainability Program (NESP) Upper Mississippi River Lock 25 New 1200-ft Lock Chamber is located at Lock and Dam 25, in Calhoun County, Illinois and Lincoln County, Missouri at river mile (RM) 241.1 on the Upper Mississippi River near Winfield, Missouri. The project is on Federally owned lands and is authorized by the Water Resources Development Act of 2007, Title VIII Upper Mississippi River and Illinois Waterway System.

## 6. Federally Owned Lands

The Project features proposed are located on lands owned by the Unites States of America, managed by the U.S. Army Corps of Engineers and operated and maintained by the U.S Fish and Wildlife Services, as shown on Table 1.

## 7. Navigation Servitude

This project does not require navigational servitude because all project features will occur on lands within the State of Illinois and are owned by the Federal Government.

## 8. Mapping

A map of the site location is shown in figure 2.

## 9. Induced Flooding

Appendix D, section 4.2 of the Hydrologic and Hydraulic Engineering section conducted a No-Rise analysis was performed on the TSP and the results are shown below.

The criteria for no rise specify that an increase in water surface of 0.0049 feet or more during the 1% AEP may require additional attention, mitigation, etc. Using the criteria of

0.0049 feet, all water surface elevations for the cross sections were less than the maximum allowable rise. The cross sections used during calibration were used for the no rise comparison through the stretch. The 1% AEP was used for this comparison. Further investigation of 'no rise' will be conducted in the design phase of this project.

An additional comparison for the 2 year, 210 kcfs flow event was analyzed. Most water surface elevations for the cross sections were less than the maximum allowable rise.

Since most cross-section's water surface elevations were less than the maximum allowable rise, from a preliminary standpoint, the 'no rise' check was complete. Further investigation and refinement will be completed in the design portion of this project.

## 10. Baseline Cost Estimate

The total estimated cost during PED and Construction is $25,000. USACE Saint Louis District Real Estate involvement during the planning and design phase and construction phase.

| Pool 25 Mississippi River, Miles 248-245 Accounts | Estimate |
|---|---|
| *01: Lands and Damages* | $0 |
| **Total L&D (FY25$)** | $0 |
| *02: Relocations* | $0 |
| **Total Relocations (FY25$)** | $0 |
| *30/31: PED/Construction* | FY25$ |
| Federal Real Estate Oversight | $20,000 |
| **Estimated TC (FY25$)** | |
| *Contingency @25%* | $5,000 |
| **Total (FY25$)** | $25,000 |

## 11. Relocation Assistance Benefits

The Tentatively Selected Plan does not require the project to provide temporary or permanent relocation benefits to residential, farm or business entities.

## 12. Mineral Activity

There are no known mineral rights or activities affecting the study area.

## 13. Sponsor Assessment

This Project is 100% a Federal Project. No Sponsor is required.

## 14. Zoning

No known zoning ordinances are proposed.

## 15. Schedule of Land Acquisition Milestones

The lands, easements, or rights-of-way required for this project are already owned by the United States of America and managed by the United States Army Corps of Engineers, operated and maintained by the United States Fish and Wildlife Services, so there is no land acquisition required for this project.

## 16. Facility or Utility Relocations

There are no requirements for facility or utility relocations.

## 17. HTRW

A Phase I ESA has been completed for the Gilead's Slough Habitat Rehabilitation and Enhancement Project (HREP) located in Calhoun County, IL using methods outlined by ASTM E2247-23. The assessment included a records review, physical site visit, and communications with persons knowledgeable of the project area and adjoining properties.

There were no RECs discovered within the project area that would impact project cost, schedule, or design. Additionally, migration of off-site contaminants into the project area is unlikely.

A Phase II ESA is not recommended. Therefore, no special considerations are being recommended for the project to proceed to construction. CEMVS EC-EQ should be contacted immediately if future development of the property discovers hazardous or toxic waste.

## 18. Landowner Attitude

There is no known landowner opposition to this Project.

## 19. Notification to the Sponsor Regarding the Risks Associated with Land Acquisition Before Execution of the Project Partnership Agreement (PPA)

This section is not applicable. The sponsor of this project is a federal entity that doesn't require the execution of a PPA. This project will be funded, 100% from congressional appropriated dollars on lands owned by the United States of America.

## 20. Other Relevant Real Estate Issues

No other known relevant real estate issues exist.

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