

THE TIME IT TAKES FOR RESTORATION

AN ANALYSIS OF MITIGATION BANKING
INSTRUMENT TIMELINES



ENVIRONMENTAL POLICY
INNOVATION
CENTER



Ecological Restoration
Business Association

About EPIC

The Restoration Economy Center, housed in the national nonprofit Environmental Policy Innovation Center (EPIC), aims to increase the scale and speed of high-quality, equitable restoration outcomes through policy change. The mission of EPIC is to build policies that deliver spectacular improvement in the speed and scale of conservation.

About ERBA

The Ecological Restoration Business Association is a national trade association with a mission to support private investment in durable environmental results that enable responsible economic growth. ERBA's membership consists of large and small mitigation bankers, In-Lieu Fee Program sponsors, conservation scientists, contractors, consultants, planners and engineers, eNGOs, and other firms within the ecological restoration industry sector. ERBA engages regularly with federal resource agencies and legislators on improvements to existing and emerging environmental markets, through promotion of policy recommendations, best practices, education, and industry reports.

Although both organizations engage in advocacy in the course of their work, the recommendations made in the report are solely based on findings from the quantitative data analysis.

Suggested citation: Steve Martin and Becca Madsen, 2023. "The Time it Takes for Restoration: An Analysis of Mitigation Bank Instrument Timelines." Environmental Policy Innovation Center and Ecological Restoration Business Association, Washington D.C.

Acknowledgements:

This report benefitted from comments and feedback from:

- Phoebe Higgins and Grace Edinger, Environmental Policy Innovation Center
- Sara Johnson, David Urban, Michael Hare, Matthew Strathman, Greg DeYoung, Jaime Zsiros, (ERBA Executive Director and members, respectively)

Report layout by: [[RAJU AHAMED](#)]

Photo credits : Cover - Daniel Coe, "[Susitna River Channels](#)," CC BY-NC-ND 2.0.

Contents

Executive Summary	5
Objective and Approach.....	6
Key Findings.....	6
Table 1. Timeline Range to Approve Mitigation Bank Instruments.....	6
Figure 1. Total Average Time to Approve Mitigation Bank Instruments.....	7
Figure 3. Timeline of Total Processing of MBIs by District.....	8
Figure 2 . Timeline of Federal Mandatory Processing of MBIs by District.....	8
Recommendations Indicated by the Data Analysis.....	9
Next Steps.....	11
Introduction	12
Figure 4. BIL Funding Summary.....	13
Box 1. Background on Compensatory Mitigation Types - Banks, In-Lieu Fee Programs, and Permittee Responsible Mitigation	14
Guide to the Report.....	16
Background on Timeline Requirements	17
Table 2. Timeline of Instrument Approval (based on the 2008 Rule, 332.8(d))	18
Methodology	19
MBI Approval Timeline Data.....	20
Table 3. ORM Data Fields and Description	21
Data Cleaning and Management.....	22
Checking ORM Against RIBITS Data	23
Figure 5. Mitigation Banks and ILFs Approved, Fiscal Year 2014 - 2021.....	23
Table 4. Approved Banks in RIBITS, Banks in Raw ORM Data, Number of Banks after Data Cleaning and Reason Removed.....	24
Table 5. Percent of ORM Data that Agreed with RIBITS from a Random Sample.....	25
Time Interval Calculations.....	25
Table 6. Time Interval Categorization and Calculations	26
Methodology for Statistical Analysis and Data Visualization.....	27
Findings	28
Are actual mandatory federal mitigation bank instrument approval timelines meeting the 225-day requirement in the 2008 Rule?.....	29
Table 7. Timeline Range to Approve Mitigation Bank Instruments.....	29
Figure 6. Total Average Time to Approve Mitigation Bank Instruments.....	30
Are there stages in the process where delays are found more often?.....	30
Figure 7. Timeline Range for Stages in Federal Mandatory Processing of MBIs.....	31
Figure 8. Timelines for Stages in Federal Mandatory Processing of MBIs - by Fiscal Year.....	32
Are approval timelines trending faster or slower over time?.....	32
Average Mandatory Federal Processing- Stages in Process.....	32
Figure 9. Timeline of Federal Mandatory Processing of MBIs by Fiscal Year.....	33
Which Districts have average timelines in the first and fourth quartiles (by mandatory federal processing, and by total processing)?.....	33
Figure 10. Timeline of Average Federal Mandatory Processing of MBIs by District - All Districts (top), and Districts that Approved 10 or More MBIs (bottom)	35
Figure 11. Timeline of Total Processing of MBIs by District - All Districts (top), and Districts that Approved 10 or More MBIs (bottom)	36
Which individual mitigation banks had average timelines in the first and fourth quartiles?.....	37
Figure 12. 25 Fastest MBI Approvals by Total Processing Time.....	37
Figure 13. 25 Slowest MBI Approvals by Total Processing Time	38
Is there a difference in processing times between MBIs and ILF programs?.....	39

Table 8. Timeline Range (in Days) – Mitigation Bank Instruments vs. ILF Programs.....	39
Figure 14. Timelines for Stages in Federal Mandatory Processing – MBIs vs. ILF Programs.....	40

Discussion 41

Compilation of Findings	42
Recommendations Indicated by the Data Analysis	44
Next Steps	46

Appendix.....47

Figure 15. Total Average Time to Approve Mitigation Bank Instruments (Full Size).....	48
Figure 16. Timeline of Federal Mandatory Processing of MBIs by District (Full Size).....	49
Figure 17. Timeline of Total Processing of MBIs by District (Full Size).....	50
Table 9. National-Level Difference in Summary Statistics Before and After Data Cleaning	51
Table 10. District-Level Difference in Summary Statistics Before and After Data Cleaning	51
ORM and RIBITS Cross-Validation Exercise.....	52
Table 11. Summary of One-Sample Statistical Tests to Determine if Average Mandatory Federal Processing Was Statistically Different from 225 Days, by Fiscal Year.....	53
Table 12. Average Timelines by District - Ordered Alphabetically.....	54
Table 13. Average Timelines by District - Ordered Shortest to Longest by Mandatory Federal Processing.....	55
Table 14. Average Timelines by District - Ordered Shortest to Longest by Total Processing.....	56
Table 15. Median Timelines by District - Ordered Alphabetically.....	57
Table 16. Median Timelines by District - Ordered Shortest to Longest by Federal Processing.....	58
Table 17. Median Timelines by District - Ordered Shortest to Longest by Total Processing.....	59
Table 18. Bank Timelines – Ordered by Average Federal Processing	60



Executive Summary

The 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (herein 2008 Rule) provides an approval process for mitigation banks and in-lieu fee programs (ILFs). The 2008 Rule stipulated required timelines for the regulator to both account for regulator workload and ensure that the process did not arbitrarily drag on. In total, the 2008 Rule requires the regulator's side of the approval process to take no more than 225 days. To date, conversations among stakeholders about timelines have largely been based on anecdotal evidence that timelines are not being met. This research aims to provide a rigorous quantitative analysis of the most complete dataset available as a foundation for fruitful dialogue.

Objective and Approach

The **objective** of this research was to determine whether actual mandatory federal mitigation bank instrument (MBI) approval timelines were meeting the 225-day requirement in the 2008 Rule. We also sought to understand if there were trends or patterns of slower or faster approval timelines by fiscal year, by stage in the approval process, or by US Army Corps of Engineers (USACE) District.

The **approach** of the research was a quantitative analysis of approval timelines recorded in the US Army Corps of Engineers' (USACE) ORM2 database (Operations and Maintenance Business Information Link Regulatory Module, version 2, generally referred to as ORM). After data cleaning, the dataset included 686 approved instruments from fiscal years 2014-2021 (496 banks and 190 ILF programs and projects). ILF data proved to be incomplete so this research focused on MBIs. The research considered the timelines in the following categories: 'Mandatory federal processing' (the timeline that the USACE is responsible for), 'Sponsor processing' (the timeline that the sponsor is responsible for), and 'Additional processing' (includes both sponsor time and federal review time with no distinction between the two in the data). See 'Methodology' section below for further details.

Key Findings

Quantitative results show that the average timeline exceeds the 225-day required timeline for mandatory federal processing of MBIs (Table 1). Mandatory federal processing of a mitigation bank instrument takes 1.5 times longer than required in regulations on average. Twenty-five percent of MBIs were approved in under 185 days, and 50% of MBIs were approved in over 281 days. The final instrument approval step is the most delayed of the three steps in the mandatory federal process, taking on average 2+ times longer than the 45 days required in regulations in all fiscal years.

Table 1. Timeline Range to Approve Mitigation Bank Instruments

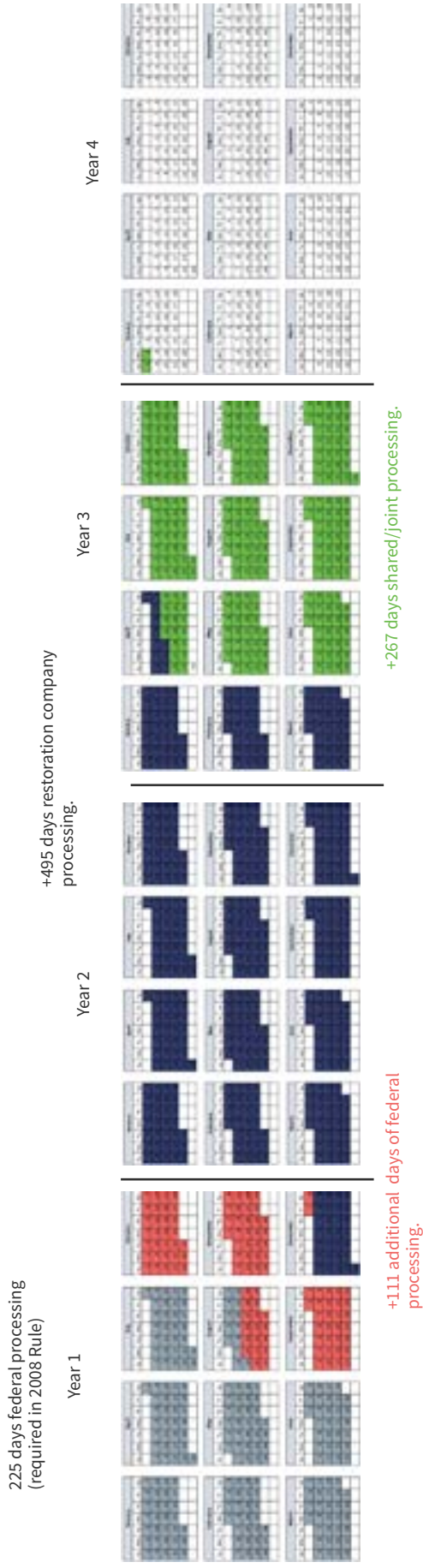
Banks (n=496)	Min	1st Quartile	2nd Quartile (Median)	Average	3rd Quartile	Max
Mandatory Federal	54	185	281	336	415	1,446
Sponsor	0	199	361	495	629	3,330
Additional	0	36	142	268	324	2,877
Total	78	618	895	1,099	1,428	4,437

'Extra' processing time (sponsor and additional processing) adds 763 days on average to the overall timeline - an extra 25 months total - and that is an underestimate, as over half of the MBI records do not record one or both 'additional' time intervals (Figure 1). Not including outliers at the 1st and 99th percentile, the fastest total time for an MBI approval was 78 days, and the slowest approval was 4,437 days (12 years and 57 days).

1. EPA and USACE, 2008. Compensatory Mitigation for Losses of Aquatic Resources under CWA Section 404 (Final Rule). [Link](#).

Figure 1. Total Average Time to Approve Mitigation Bank Instruments

See Figure 15, Appendix for Full-Size Figure



Some Districts have faster approval processes (Figure 2 and 3). Six Districts averaged less than 225 days for mandatory federal processing of MBIs (Mobile, San Francisco, Tulsa, St. Louis, Rock Island, and Pittsburgh). Nine Districts approved 50% of MBIs in less than 225 days of federal processing: Mobile, Louisville, St. Louis, San Francisco, Tulsa, Portland, Vicksburg, Sacramento, and Pittsburgh (Rock Island was close, with an average of 226 days).

Caveats regarding District findings. Below in 'Findings' we note that some Districts had more banks in RIBITS than in the ORM data, meaning an incomplete representation of timelines; removal of outlier records in some Districts (e.g., Tulsa, Savannah) dramatically reduced federal mandatory timelines; and the data does not make a distinction of whether single or multiple benefit banks were approved, which could increase timelines.

From a small sample of ILF programs (n=32), there were not large differences in average processing time between ILF programs and mitigation banks (Table 8), although banks had a larger spread of processing timelines (Figure 14).

Using the ORM data at hand, we could only assess a limited number of questions about factors contributing to faster or slower timelines. Approval timelines were not statistically related to the number of banks being processed in a District, and timelines were not found to be trending faster or slower over the years. There is a delay code in ORM that could indicate factors associated with longer timelines, but it was not used in Fiscal Years 2014 - 2021. Additionally, data entry errors were found throughout the data, with 11% of the original data removed from analysis due to having four or more of the same date entered in the time intervals, or four or more blank time intervals.

Figure 2 . Timeline of Federal Mandatory Processing of MBIs by District

See Figure 15, Appendix for Full-Size Figure

Districts are ordered from shortest average timeline at the bottom to longest timeline at the top. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021. The red line indicates the 225-day timeline required in the 2008 Rule, and the red x indicates the mean (average) for each District.

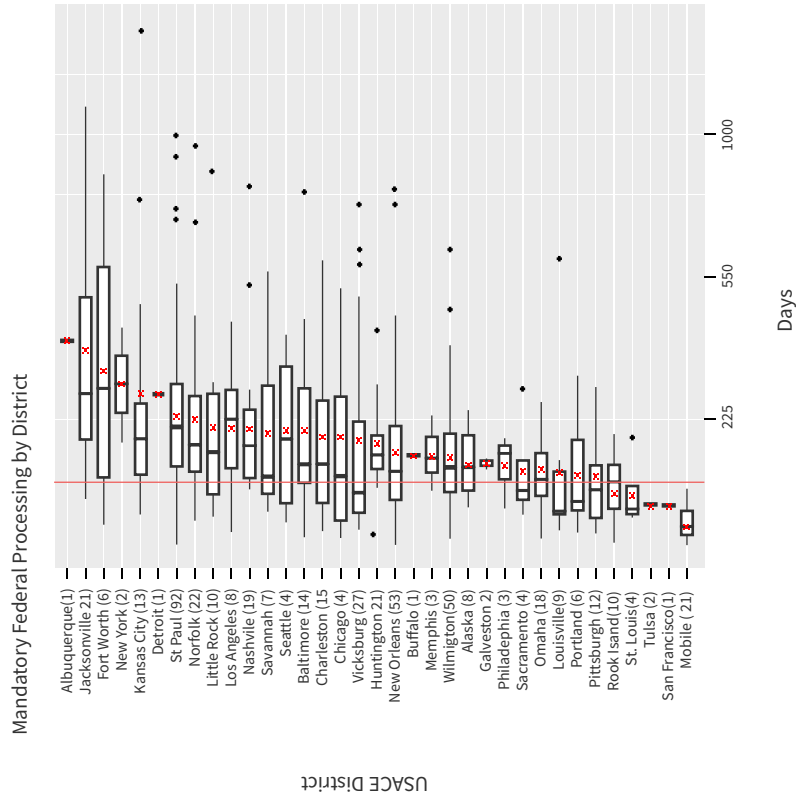
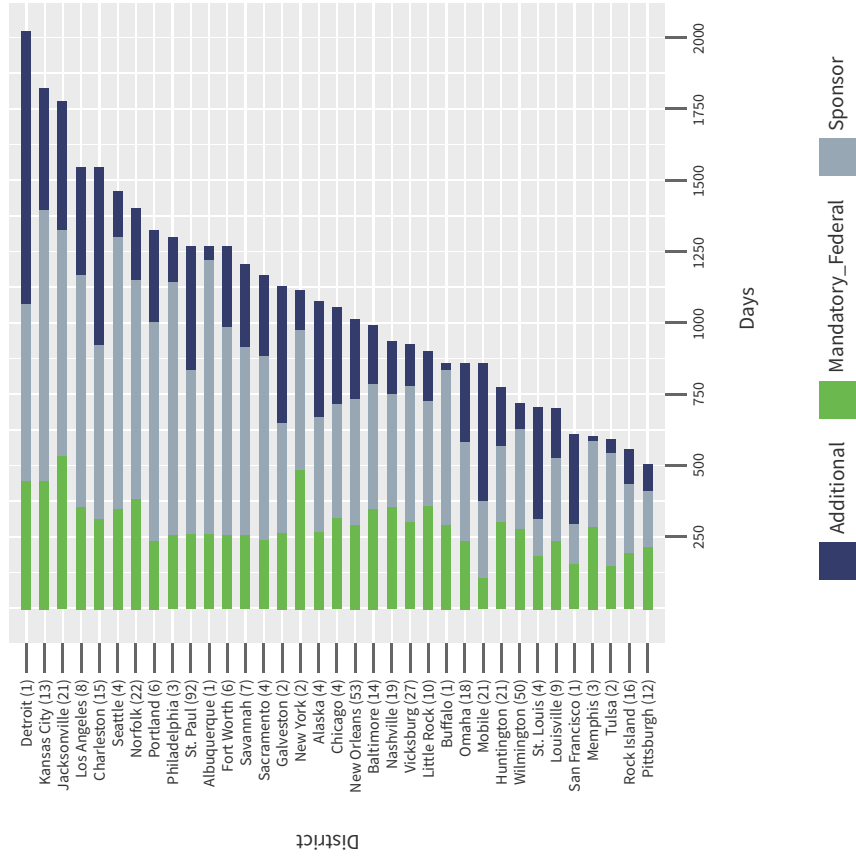


Figure 3. Timeline of Total Processing of MBIs by District

See Figure 16, Appendix for Full-Size Figure

Districts are ordered from shortest processing at the bottom to longest timeline at the top. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021.



Recommendations Indicated by the Data Analysis

The recommendations herein are solely based on findings from the data analysis.

- ▶ **The 225-Day Timeline is not Being Met, and the USACE Should Identify Opportunities for Improving Performance in Approval Processes.** The data analysis does not directly point to a recommendation, but we suggest the Corps consider opportunities for addressing this such as analyzing whether Districts have sufficient tools and provide training for facilitating bank and ILF instrument development (e.g., template prospectus and template instruments), regularly scheduled IRT meetings, or adequate training on managing the instrument approval process.

- ▶ **Using Delay Codes in ORM Will Help Adaptive Management.** The data currently only show that delays are happening, and do not indicate *why*. ORM already includes delay codes, so no change to the infrastructure is needed. Using delay codes could help identify factors associated with slower timelines and bring delayed projects to the surface more easily, helping troubleshoot issues more readily. Examples of delay codes that could be used: endangered species consultation, historic property coordination, government to government consultation, or lack of sufficient information to make a decision on proposed instruments.

- ▶ **ORM Data Entry Error Would be Improved with Automated Flags.** Many online forms and data entry tools automatically detect potential data entry errors such as having a finish time before the start time, having multiple time interval fields with the same date, having an incongruously short time interval (e.g., an MBI approval of less than 60 days), or leaving important fields blank. This functionality could reduce the number of errors in the database.

- ▶ **USACE Training, Guidance And/Or Consistency Would Aid Data Entry of ILF Programs and Projects.** The discrepancy identified between RIBITS and ORM ILF data (see Methodology section) could be addressed with a consistent and required guidance for USACE tracking of ILF projects in ORM.

- ▶ **'Additional' Time Intervals are Problematic and Should be Addressed.** The following time intervals include both sponsor time and federal review time with no distinction between the two in the data: the time between receipt of a draft prospectus through USACE deeming it complete, and the time between receipt of a draft instrument and USACE deeming it complete. A further refined 'check in/check out' option could provide this distinction. Currently, these time intervals are not recorded in 53% of MBI records. The data does not indicate why this is the case. Furthermore, there is no 'timestamp' indicating the time between receipt of a draft final instrument and USACE deeming it complete, which could erroneously count time spent by the sponsor towards the 225-day timeline.

- ▶ **USACE Mission Success Criteria 5.1 Should Remove 'Sponsor' Time from its Metric.** The metric for the USACE's mission success criteria 5.1 is based on total time, but this includes time that the USACE is not responsible for. USACE should consider removing 'sponsor' time from the metric. Furthermore, if it were possible to distinguish and only include USACE's portion of 'additional' time (per the previous recommendation), the metric could better reflect the time under USACE's control.

▶ **USACE Should Create Automated Reporting of Performance on 225-Day Timeline to Stakeholders.** The data is available to track and report performance on the 225-day regulatory requirement but has not been publicly reported to date. Our use of R programming for analysis provides proof that computer code could be written to regularly and efficiently run analyses for internal adaptive management and external transparency to stakeholders. The State of Virginia’s recently launched Permitting Evaluation and Enhancement Program (PEEP) is another example of tracking and automated reporting of target timeframes. PEEP is an online platform that provides transparency to the permittee as well as the public about where a permit is in the approval process, including when it was received, whose desk it’s on now (including coordination with external agencies like USACE when applicable), and how much time the steps in the process are taking vs. target timeframes.

▶ **Create Database Syncing to Ensure that ORM and RIBITS Data Agree.** An attempt to validate a random sample of ORM time interval data with RIBITS data found that the two datasets do not agree. For example, six Districts have at least 33% fewer MBI entries in ORM than in RIBITS. In addition, Corps staff have to enter information into each system, increasing the chance of errors and inconsistencies. USACE could investigate opportunities to further sync ORM and RIBITS data.

-
2. Personal communication, 2022
 3. Virginia Department of Environmental Quality, 2002. Permitting Enhancement and Evaluation Platform (website). Accessed January 2023. [Link](#).
 4. Madsen, 2022. “If You Can Track a Pizza, You Can Track a Permit” (blog). [Link](#).
-

Next Steps

This is the first quantitative analysis published on mitigation bank instrument approval timelines obtained from the USACE ORM database. The findings can be used by stakeholders in the MBI approval process to understand what the data is showing about specific Districts or individual banks. While the data quantitatively show that the 225-day required timeline in the Rule is not being met on average, this analysis is not just about identifying missed timelines, but about taking the first step in adaptive management. If the only information available is opinions like “It’s too slow!” stakeholders may dig in about whether this is true or not based on anecdotes rather than data. The results in this report are based on the most complete dataset compiled to date and provide a foundation for productive dialogue.

However, the data only reflects what is recorded and offers no details on what factors are influencing timelines - for better or worse. Qualitative research could identify which factors influence timelines such as those identified by Kihslinger et al., 2019, including: staff resources, availability of templates, project management tools or procedures, complexity of the project, experience of the sponsor, IRT methods for tracking comments and responses, IRT methods for determining agreement / dealing with disagreement, and more. Informational interviews with USACE District staff and sponsors focused on these topics could provide context and insight, particularly for Districts and banks in the upper and lower timeline quartiles indicated by this analysis.

Integration of results of quantitative analyses like this one and qualitative analyses of the bank approval process may lead to tools and approaches that facilitate future development of mitigation banks and ILF programs.

-
5. Two other quantitative analyses of timelines have been *presented* at national mitigation banking conferences - the first in 2010, analyzing a sample of roughly 80 timelines (BenDor, Todd K., Daniel Spethman, David Urban. 2010. Economic Impact of Regulatory Timing on Mitigation Bank Returns. National Mitigation and Ecosystem Banking Conference. Austin, Texas), and the second in 2019 presenting timeline data from 2008-2018 (Martin, Steve, 2019. Characterization and Analysis of 3rd Party Mitigation 2008-2018 Using ORM & RIBITS Data. Presentation at the 2019 National Mitigation and Ecosystem Banking Conference. Accessed September 2022. [Link](#)).
-

Introduction

The Infrastructure Investment and Jobs Act (IIJA), also referred to as the Bipartisan Infrastructure Law (BIL), will spend more than \$600 billion on transportation and other physical infrastructure (Figure 4). Many of these projects will expand renewable energy and bring climate mitigation benefits. At the same time, there will be impacts to wetlands, streams, and species. Compensatory mitigation is a way to allow development to advance while offsetting impacts with restoration and protection of natural resources.

Figure 4. BIL Funding Summary

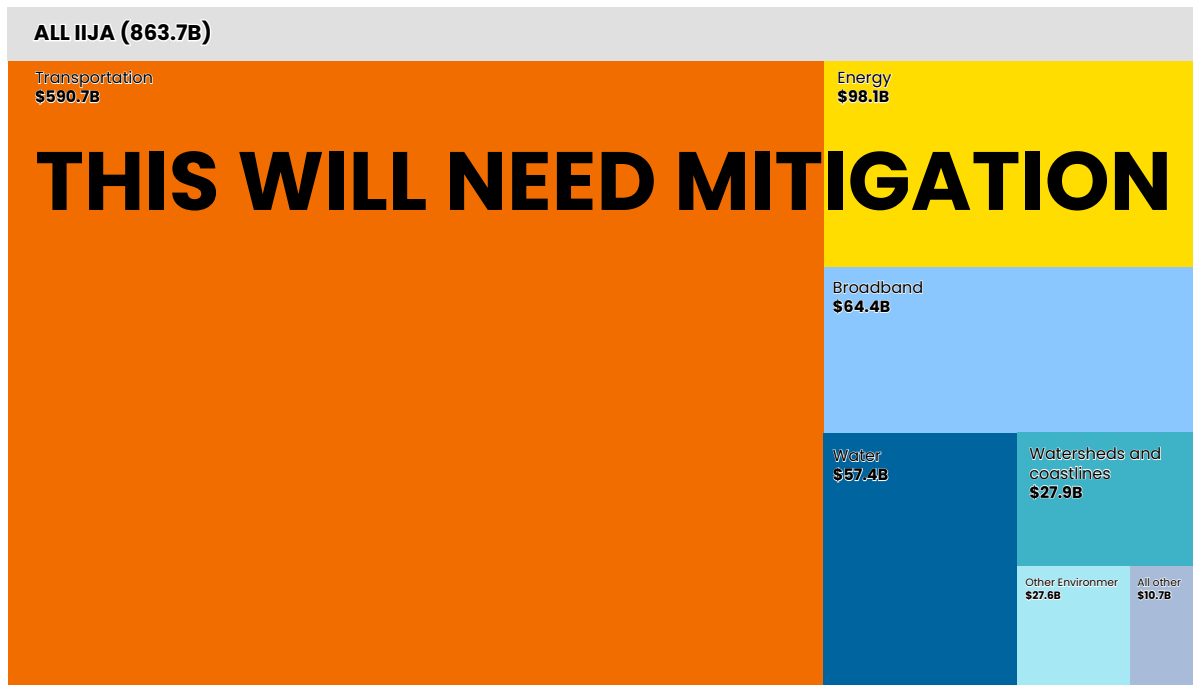


Image credit: [The Brookings Institute, 2022](#)

Wetlands and streams provide valuable services such as flood control, protection and improvement of water quality, carbon sequestration, and wildlife habitat. Compensatory mitigation created in-advance of impacts ensures that the services that wetlands or streams provide are not lost between the time of impact and the time the compensatory mitigation has been completed ('temporal loss').

The United States has the world's largest quantity of wetland and stream restoration 'banking', largely due to the 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources - herein 2008 Rule - which creates an explicit preference for in-advance compensatory mitigation. Details on compensatory mitigation types can be found in Box 1.

The 2008 Rule also created timelines for the compensatory mitigation approval process to "provide efficiency to the review and approval process for third party mitigation, while taking into account the workload of the agencies." Both mitigation banks and ILFs require the approval of a "legal document for the establishment, operation, and use", called an MBI or ILF program instrument (both referred to in this paper as 'instrument'). Federal processing is to take no longer than 225 days for the required phases of instrument approval (see additional detail in the section 'Background on Timeline Requirements'). The timeline of approval is important for ensuring that higher-quality compensatory mitigation is not undermined by permittee responsible mitigation (PRM) that could be approved more quickly. Delayed approvals are also an issue as this could increase the overall cost of developing a mitigation bank or ILF.

6. Note: "THIS WILL NEED MITIGATION" added by the authors.

Box 1. Background on Compensatory Mitigation Types – Banks, In-Lieu Fee Programs, and Permittee Responsible Mitigation

Under the Clean Water Act (CWA) Section 404, most permanent losses of wetlands and streams must be mitigated. The 2008 Rule defines compensatory mitigation as “restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.” Compensatory mitigation can be provided by the project proponent (PRM), a government- or nonprofit-managed ILF, or a mitigation bank. Mitigation banks are given preference in the 2008 Rule because they generally involve a larger, more ecologically valuable scale of restoration and preservation, and are created in advance of impacts which ensures that the loss of functions that wetlands or streams provide are minimized between the time of impact and the time the compensatory mitigation has been completed (‘temporal loss’). ILF programs are given second preference because they also generally create a more ecologically valuable scale of restoration and preservation than PRM, but there may be a temporal loss between collection of funds and completed restoration (project initiation must start within three growing seasons of the first credit sale in an area).

7. Ibid., EPA and USACE, 2008.
 8. Bennett et al., 2017. State of Biodiversity Mitigation 2017: Markets and Compensation for Global Infrastructure Development. October 2017. [Link](#).
 9. Ibid., EPA and USACE, 2008, at 33 CFR 332.8(d)/40 CFR 230.98(d)
 10. There is not a required timeline for PRM approval. PRM could be approved under various permits such as a standard permit, individual permit, or Nationwide Permit 27 (NWP 27) which is specifically for restoration projects with net ecological gain. NWP 27 is a streamlined permitting process that takes 45 days or less (Madsen, Becca, 2022. Streamlining Restoration Projects with Nationwide Permit 27: An Explainer. EPIC, 2022. [Link](#)). The goal for most other PRM permit approvals is generally in the ballpark of 120 days after submission of a complete permit application.
 11. Ibid., EPA and USACE, 2008.
 12. A recent internal USACE analysis analyzed the 2008 Rule’s preference for mitigation banking, then ILF, then PRM mitigation (Beaudet, Andy, 2022. USACE Report on Internal Audit. Presentation at the 2022 National Mitigation and Ecosystem Banking Conference, General Session on Compensatory Mitigation Practices. May 4, 2022. Agenda accessed September 2022. [Link](#)). The analysis determined that the agency was largely adhering to the 2008 Rule preference hierarchy. This is good news for existing mitigation banks, but it does not alter the potential for approval timelines to cause such costs as to make a new mitigation bank or ILF development infeasible / unprofitable and thus remove the incentive for these preferred options to be developed in the first place.
-

Mitigation bankers have provided anecdotes and internally-tracked data that suggest that timelines are not being met. Two recent studies also indicate the same conclusion. Martin (2019) examined ORM timeline data, and found that the mean federal processing times for banks and ILFs averaged more than 400 days. Kihslinger et al. (2020) summarized challenges in the instrument review process based on interviews with individuals from USACE, the Environmental Protection Agency (EPA), Fish and Wildlife Service (FWS), state agencies, mitigation bankers, ILF program sponsors, and a nonprofit organization. Interviewees identified a myriad of factors influencing timelines and recommendations for improvements, too numerous to list here (see p.38-39 for a summary). Timelines self-reported in the study ranged from 119 to 1,800 days.

This research builds on previous analyses by extending the timeframe of analysis to the period of fiscal years 2014-2021 and dividing processing time into 3 distinct elements:

- 1. Mandatory federal processing** - The timeline that the USACE is responsible for, including review of the complete prospectus, complete draft instrument, and complete final instrument.
- 2. Sponsor processing** - The timeline that the sponsor is responsible for, including preparation of the prospectus and draft instrument.
- 3. Additional processing** - Includes both sponsor time and federal review time with no distinction between the two in the data, including the review of prospectus completeness, and review of draft instrument completeness. In some cases there is no delay, in others there may be considerable back and forth between sponsor and district before the product is complete.

-
13. Additional research is anticipated, as H.R.7776, the Water Resources Development Act of 2022 (WRDA) included a requirement that the US GAO conduct a review of the “extent to which the [2008 Rule] is consistently implemented by the districts of the Corps of Engineers; and (B) the performance of each of the mitigation mechanisms included in the final rule.” It is unknown though whether this includes an analysis of instrument timelines. The bill became law on December 27 2022 and the report is due one year from enactment. [Link](#).
 14. Martin, Steve, 2019. Characterization and Analysis of 3rd Party Mitigation 2008-2018 Using ORM & RIBITS Data. Presentation at the 2019 National Mitigation and Ecosystem Banking Conference. Accessed September 2022. [Link](#).
 15. Kihslinger, R., McElfish, J.M., Jr., Scicchitano, D.; 2020. Improving Compensatory Mitigation Project Review. Environmental Law Institute, Washington, D.C. Accessed September 2022. [Link](#).
-

The **objective** of the research was to determine whether actual mandatory federal mitigation bank instrument approval timelines were meeting the 225-day requirement in the 2008 Rule.

Additional research questions include:

1. Are there stages in the process where delays are found more often?
2. Are approval timelines trending faster or slower over time?
3. Which Districts have average timelines in the first and fourth quartiles?
4. Which individual mitigation banks had average timelines in the first and fourth quartiles?
5. Is there a difference in processing times between banks and ILF programs?

We intended to analyze whether there were differences in approval timelines between mitigation banks and ILFs, but ILF project data was incomplete (see 'Methodology' section below). **Analysis therefore focuses on MBI processing times.**

Guide to the Report

1. **Background on Timeline Requirements** provides detail on the steps in the instrument approval process.
2. **Methodology** describes the ORM data obtained, data cleaning and management steps, time interval calculations, and methodology for data analysis/visualization.
3. **Findings** reviews the results of analyses used to answer the research questions noted above. This section also includes insights tangential to our research questions such as our observations about data entry errors.
4. **Discussion** includes a compilation of the findings, recommendations indicated by the data analysis, and next steps.
5. **Appendix** provides additional charts, graphs, and data from the analysis.

Background on Timeline Requirements

This section provides detail on the steps in the mitigation bank instrument approval process.

Mitigation bank and ILF instruments “provide the authorization for the mitigation bank or ILF program to provide credits to be used as compensatory mitigation for [USACE] permits” (2008 Rule). The 2008 Rule provides a review process for instruments with timelines to “provide efficiency to the review and approval process for third party mitigation, while taking into account the workload of the agencies” (33 CFR 332.8(d)/40 CFR 230.98(d)). The approval process is led by the USACE, and is informed by public comment and review and advice from an Interagency Review Team (IRT) that consists of federal, tribal, state &/or local regulatory and resource agency representatives. Timelines for approval are broken up into steps. The total timeline for mandatory federal review of the complete prospectus to final decision to approve or not approve the instrument is 225 days or less. There are other steps that are recorded but not included in the 225-day timeline. In Table 2 we describe these steps, noting the times the ‘clock’ starts and stops based on activities, and whether these steps were categorized as ‘Mandatory federal’ (counted towards the 225-day timeline), ‘Additional’, or ‘Sponsor’ processing.

Table 2. Timeline of Instrument Approval (based on the 2008 Rule, 332.8(d))

Category	Category
Additional processing	<p>Optional Draft Prospectus & Review of Prospectus Completeness</p> <p>A sponsor has the option to submit a draft prospectus and receive comments back from the USACE and IRT within 30 days. The sponsor submits a prospectus to the USACE that provides an overview of the project that is sufficiently detailed to allow the public and the IRT to provide initial comments (see 33 CFR 332.8(d)(2)(i - vii) for the information required in the prospectus). The USACE has 30 days to notify the sponsor whether the prospectus is complete. The USACE may record the time when the optional draft prospectus or prospectus first arrives and the time when the USACE determines that the prospectus is complete, but the time is not counted as mandatory federal processing time. We identified in the ORM data that 21% of the MBI records do not start data entry until receipt of a complete prospectus, so ORM timeline data for this step may not be reliable.</p>
Mandatory federal processing (90 days)	<p>Prospectus</p> <p>The mandatory federal processing ‘clock starts’ when a complete prospectus is received by the USACE. The USACE must provide public notice within 30 days of receipt of the prospectus and allow the comment period to be open for 30 days. After the public comment period closes, the USACE has 15 days to provide any comments to the sponsor and to the IRT. The USACE has 30 days from the end of the comment period to provide an initial evaluation letter to the sponsor informing them whether the proposal has the potential to provide compensatory mitigation and may proceed. If the evaluation concludes the project does not have potential, the sponsor may optionally submit a revised prospectus, at which point this step would repeat. Total mandatory federal timeline for this step: 90 days.</p>
Sponsor processing	<p>Draft Instrument Preparation</p> <p>The sponsor receives an initial evaluation letter and prepares a draft instrument to the USACE (see 33 CFR 332.8(d)(6)(ii-iii) for the information required in the draft instrument).</p>
Additional processing	<p>Review of Draft Instrument Completeness</p> <p>After the sponsor submits a draft instrument, the USACE has 30 days to notify the sponsor whether the draft instrument is complete. The USACE records the time when the draft instrument first arrives and the time when the USACE determines that the draft instrument is complete. There could be one or more revision steps where the draft instrument is not deemed complete and sent back to the sponsor but there is no distinction in the data between federal review time and sponsor time.</p>
Mandatory federal processing (90 days)	<p>Draft Instrument</p> <p>The mandatory federal processing clock starts up again when a complete draft instrument is received by the USACE. The USACE and IRT have 30 days to comment, then there may be discussion between the IRT agencies, the USACE, and the sponsor. Within 90 days (inclusive of the comment period), the USACE will indicate to the sponsor whether the draft instrument is acceptable and what changes, if any, are needed.</p>
Sponsor processing	<p>Final Instrument Preparation</p> <p>The time between receipt of USACE / Interagency Review Team (IRT) notification of acceptability & comments about changes needed; and when the USACE determines the final instrument is complete.</p>
Mandatory federal processing (45 days)	<p>Final Instrument</p> <p>The clock starts when the final instrument that has addressed IRT comments is received by the USACE (IRT members also receive the final instrument). Within 30 days, the USACE tells the IRT whether they intend to approve the instrument and the IRT has 15 days after the USACE decision to file an objection. If there is an objection, a dispute resolution process starts (with final decision within a total of ≤150 days from receipt of final instrument) but if there is no objection, the approval is provided within a total of 45 days from receipt of the final instrument.</p>
≤ 225 Days	TOTAL MANDATORY FEDERAL PROCESSING TIME WITHOUT DISPUTE RESOLUTION PROCESS

Methodology

This section describes the ORM data obtained, data cleaning and management steps, time interval calculations, and methodology for data analysis/visualization.

To address the research question of whether actual mitigation bank instrument approval timelines were statistically different from the timelines required in the 2008 Rule, the research undertook the following steps:

1. Gathered MBI approval timeline data from the USACE ORM database,
2. Data cleaning and management (including review of ORM data against RIBITS data),
3. Calculated time intervals, and
4. Performed statistical analysis and data visualization.

MBI Approval Timeline Data

The USACE has developed a database to track all CWA Section 404 permits nationwide since June 2007 (USACE, 2021). The database - Operations and Maintenance Business Information Link - is commonly called 'ORM' although the technically correct acronym is ORM2. ORM is used by USACE staff to document activity on all regulatory projects including permit actions on an ongoing basis. Data is aggregated annually in response to FOIA requests. The ORM data is technically public but is not available without a FOIA request. The Ecological Restoration Business Association (ERBA) obtained ORM data from fiscal year (FY) 2014 - 2021 for all approved banks and ILFs (pending data was not requested). Data from FY2014 to the present has more complete data entry for timeline approval steps, due to an internal USACE mandatory memo requiring Districts to more diligently enter data.

In total, the aggregated dataset included 819 records of banks and ILFs approved during this period. A record might be a regular mitigation bank site, an umbrella mitigation bank (with at least one specific site, per the 2008 Rule), a new project within an umbrella mitigation bank, an ILF program, or a new project within an ILF program. The FOIA request asked for a number of data fields (Table 3). There is not a publicly available data dictionary, thus the description of the data fields in Table 3 is based on the authors' experience and not an official description from the USACE.

-
16. The prospectus and draft instrument stage would likely be considered 'deliberative' and thus not releasable under FOIA.
 17. USACE, 2014. Mandatory Data Collection Requirements in ORM2 for the Regulatory Program. Memo from Headquarters. 13pp. Information provided by USACE as part of a FOIA request of ORM2 data.
 18. It is possible that new projects within an umbrella bank or ILF program have quicker approval processes since much of the project has already undergone review, but we were unable to analyze this as the data does not make a distinction.
-

Table 3. ORM Data Fields and Description

ORM Data Field	Description
ACTION FOLDER ID	Unique ID
ACTION ID	Unique ID
DISTRICT	USACE District 3-letter acronym
ORGANIZATION NAME	Subcategory of USACE District (e.g., North Branch, Special Projects) or repeat of District but text name
DA NUMBER	Permit number
PROJECT NAME	Bank or ILF name
ACTION TYPE	Indicates development of a mitigation bank ('DEV MBA') or ILF ('DEV IN LIEU')
BEGIN DATE	Date action was initiated (paperwork first received)
DISPUTE RES INITIATED	Date dispute resolution process initiated
DATE DRAFT PROSPECTUS RECEIVED	Self-explanatory
DATE COMPLETE PROSPECTUS RECEIVED	Date the USACE deems that the prospectus is complete
DATE EVALUATE LETTER	Date the USACE provides an initial evaluation letter / whether the proposal may proceed
DATE DRAFT INSTRUMENT RECEIVED	Self-explanatory
DATE COMPLETE INSTRUMENT RECEIVED	Date the USACE deems that the draft instrument is complete
DATE IRT DISTRIBUTE	Date the USACE distributes the complete draft instrument to the IRT
DATE INSTRUMENT COMMENTS RECEIVED	Date when USACE receives comments on the draft instrument which are subsequently provided to the sponsor
DATE IRT FINAL RECEIVED	Date the final instrument is complete and distributed to the USACE and IRT
DATE DISTRICT ENGINEER FINAL DECISION	Date of final approval or denial of instrument
STATE	Self-explanatory
DATE DISTRICT ENGINEER FINAL DECISION	Date of final approval or denial of instrument

Data Cleaning and Management

The original dataset consisted of 819 starting records (603 banks and 216 ILFs). The following actions were taken to manage and organize the data:

- Records with a begin date prior to 2008 were removed, as these preceded the 2008 Rules that established the timeline for instrument approval (n=25).
- Duplicate records were removed (n=4).
- Twelve records were mis-labeled as mitigation banks, when they were actually ILF projects. This was corrected in the data.
- Records with indications of inaccurate data entry were removed. This included: records with four or more of the same ‘timestamps’ (n=34), and records with four or more blank ‘timestamps’ (n=46). Records with inaccurate data entry were also identified after performing the time interval calculations (see below): records with a negative time interval - meaning the begin date was after the end date (n=6), and one record with zero mandatory federal processing days (n=1).
- After calculating the total mandatory federal processing time, outliers below the 1st percentile or above the 99th percentile (identified in R) were removed (n=16: 10 MBIs, 6 ILFs). These included eight banks with total mandatory federal processing between 1 - 51 days, and eight banks with processing between 1,456 - 3,288 days. Removing outliers resulted in modest decreases to national level findings (e.g., about 20 fewer days of average processing, see Appendix Table 9) and variable changes in District level summary statistics (Appendix Table 10). Of the seven Districts that had outlier records removed, this resulted in particularly large changes in the average timeline in two Districts. The average federal mandatory processing went from 728 days to 362 days in Savannah, and from 688 days to 164 days in Tulsa, both from removing only one record.

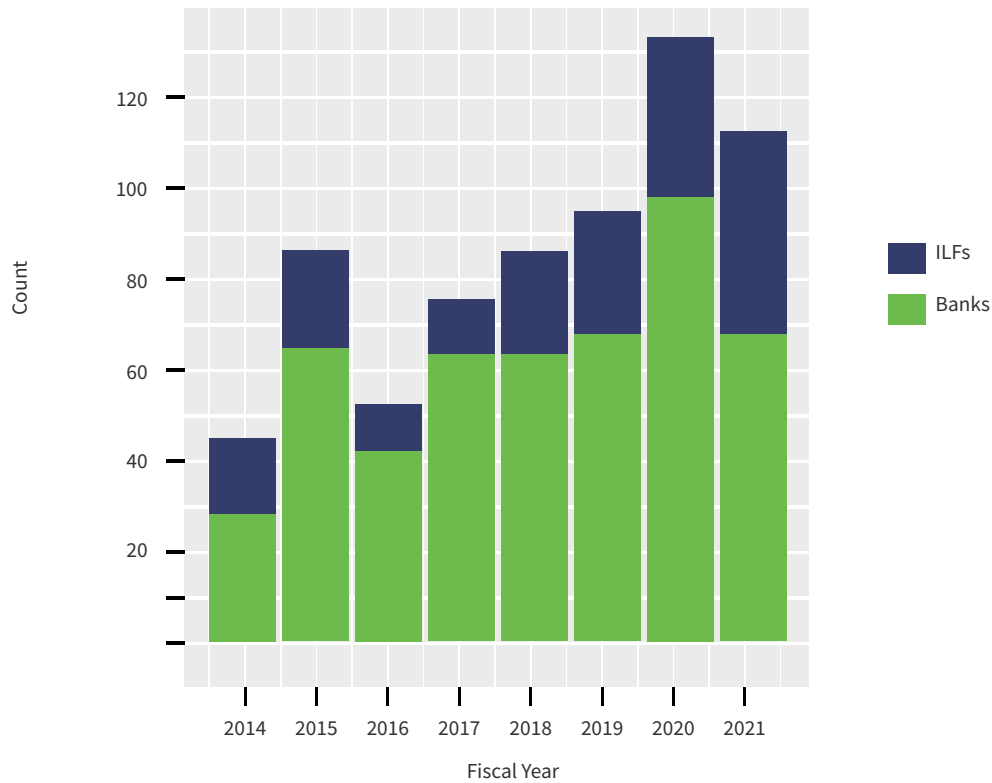
Table 4 in ‘Checking ORM Against RIBITS Data’ below summarizes all of the records removed and reason for removing them.

Several data management steps were also taken, including adding: a textual District Name column in addition to the existing 3-letter District acronym, Calendar Year and Fiscal Year (October 1 - September 30) based on the date of instrument approval.

After the above data cleaning and management steps were taken, a total of 686 records remained (496 banks and 190 ILFs, see Figure 5).

19. The researchers also considered dropping outliers at the 5th and 95th percentile - this would remove 56 records and would be a trade-off between volume of data analyzed (which the researchers thought was more important) and less skewed data.

Figure 5. Mitigation Banks and ILFs Approved, Fiscal Year 2014 – 2021



Checking ORM Against RIBITS Data

To understand how comprehensive this dataset was, the researchers compared ORM data to the number of banks and ILFs approved in RIBITS (Regulatory In-lieu Fee & Bank Info Tracking System). From fiscal year 2014 - 2021, ORM had 603 banks (prior to data cleaning) as compared to RIBITS' 637, which indicated a somewhat accurate representation (e.g., 95%). Certain Districts have not recorded as many MBIs in ORM as in RIBITS (Table 4). In particular, six Districts have at least 33% fewer MBI entries in ORM than in RIBITS. Missing records means an incomplete representation of timelines in our analysis, particularly for these Districts. Conversely, eight Districts had more bank approvals for the study period in ORM than RIBITS. A closer examination found that most of those bank records had approval dates in RIBITS that were outside the FY14-FY21 study period. Several banks had not yet been marked as approved in RIBITS.

Table 4. Approved Banks in RIBITS, Banks in Raw ORM Data, Number of Banks after Data Cleaning and Reason Removed

District (# banks)	RIBITS # banks	ORM raw # banks	# Banks after data cleaning	# Banks removed	Reason removed
Alaska	5	4	4	0	
Albuquerque	1	1	1	0	
Baltimore	9	14	14	0	
Buffalo	4	1	1	0	
Charleston	17	15	15	0	
Chicago	6	4	4	0	
Detroit	1	1	1	0	
Fort Worth	9	6	6	0	
Galveston	12	6	2	4	4 time errors
Huntington	22	21	21	0	
Jacksonville	33	22	21	1	1 time error
Kansas City	17	17	13	4	1 pre-2008, 3 time errors
Little Rock	11	12	10	2	1 outlier, 1 time error
Los Angeles	7	8	8	0	
Louisville	11	11	9	2	2 time errors
Memphis	5	5	3	2	1 zero or negative federal mandatory time interval, 1 time errors
Mobile	26	24	21	3	1 outlier, 2 time errors
Nashville	17	22	19	3	1 pre-2008, 2 time errors
New Orleans	68	64	53	11	1 zero or negative federal mandatory time interval, 1 duplicate, 9 time errors
New York	2	2	2	0	
Norfolk	39	28	22	6	1 outlier, 4 time errors, 1 duplicate
Omaha	19	23	18	5	1 duplicate, 1 outlier, 3 time errors
Philadelphia	4	3	3	0	
Pittsburgh	15	12	12	0	
Portland	5	6	6	0	
Rock Island	18	16	16	0	
Sacramento	8	9	4	5	1 zero or negative federal mandatory time interval, 1 pre-2008, 3 time errors
San Francisco	0	2	1	1	1 duplicate
Savannah	15	12	7	5	1 outlier, 1 pre-2008, 3 time errors
Seattle	5	5	4	1	1 time error
St. Louis	3	4	4	0	
St. Paul	114	133	92	41	2 zero or negative federal mandatory time interval, 1 duplicate, 4 outliers, 19 pre-2008, 15 time errors
Tulsa	2	4	2	2	1 outlier, 1 time error
Vicksburg	33	33	27	6	1 zero or negative federal mandatory time interval, 5 time errors
Walla Walla	1	0	0	NA	
Wilmington	75	53	50	3	1 pre-2008, 2 time errors
TOTAL	639	603	496	107	

For ILFs, however, RIBITS had 416 ILF projects and 32 ILF programs vs. 163 ILF projects and 32 ILF programs in ORM. ILF projects in many districts including Norfolk, New England, Louisville, Omaha, and Huntington were under-represented in the ORM data. The large discrepancy between the ORM and RIBITS ILF data leads us to believe that the ORM ILF project level data is incomplete. Analysis below therefore focused on MBI processing times. We did briefly analyze a small sample of 32 ILF programs (see Findings section below).

Researchers also attempted to validate time interval data in ORM through a comparison with RIBITS data (or District web pages if data was not found on RIBITS) using a random sample of 10% of the bank data (51 MBI records) and 20% of the ILF program data (7 records). The two datasets do not completely agree, which suggests that the two databases do not sync records (Table 5). Additionally, many RIBITS records (or District websites) lacked publicly visible notices of prospectus (60% unavailable) and 39% lacked final MBIs (see additional information in Appendix, ‘ORM and RIBITS Cross-Validation Exercise’).

Table 5. Percent of ORM Data that Agreed with RIBITS from a Random Sample

Note: The sample was 58 records (51 banks and 7 ILF programs)

Time Interval	% of ORM data that agreed with RIBITS data	Notes
Approval date	82%	RIBITS time stamps for 38 banks & 4 ILFs were within 7 days of ORM. Three bank records had no approval date in RIBITS, and 13 records (10 bank, 3 ILF) differed from ORM by 2 weeks to 7 months.
Complete prospectus	19%	60% of records did not have time stamps in RIBITS (30 banks, 5 ILFs). Of those with RIBITS time stamps, about half were within 7 days of ORM.

Time Interval Calculations

ORM data records ‘timestamps’ for particular activities. As the 225-day timeline in the 2008 Rule applies only to the mandatory federal processing part of the entire approval process, time intervals (number of days) were calculated and categorized as ‘Mandatory federal’, ‘Additional’, or ‘Sponsor’ processing for discrete steps in the process based on ORM data (Table 6). Totals were also calculated overall and for Mandatory federal, Additional, and Sponsor time intervals.

Table 6. Time Interval Categorization and Calculations

Time Interval	Categorization	Data Calculation
Optional draft prospectus & review of prospectus completeness	Additional processing	DATE COMPLETE PROSPECTUS RECEIVED - BEGIN DATE
Prospectus	Mandatory federal processing	DATE EVALUATE LETTER - DATE COMPLETE PROSPECTUS RECEIVED
Draft instrument preparation	Sponsor processing	DATE DRAFT INSTRUMENT RECEIVED - DATE EVALUATE LETTER
Review of draft instrument completeness	Additional processing	DATE COMPLETE INSTRUMENT RECEIVED - DATE DRAFT INSTRUMENT RECEIVED
Draft instrument	Mandatory federal processing	DATE INSTRUMENT COMMENTS RECEIVED - DATE COMPLETE INSTRUMENT RECEIVED
Final instrument preparation	Sponsor processing	DATE IRT RECEIVE FINAL INSTRUMENT - DATE INSTRUMENT COMMENTS RECEIVED
Final instrument	Mandatory federal processing	DATE OF DISTRICT ENGINEER'S FINAL DECISION - DATE IRT RECEIVE FINAL INSTRUMENT

Methodology for Statistical Analysis and Data Visualization

The data was analyzed to determine if instrument processing time was statistically significantly different than required processing time. The researchers analyzed the data and created visualizations in both Excel and R programming - checking the validity of results against each other. R programming has the advantage of re-using the programming script if there is a desire to analyze new data as it becomes available.

Summary statistics were calculated for various time intervals (e.g., total mandatory federal processing, total sponsor processing). Normality of data was checked with both data visualizations (e.g., boxplots), and the Shapiro-Wilk normality test. Most time interval data were not normal (exceptions are noted below in findings). Non-transformed time interval data was skewed by a number of projects that took in excess of 1,000 days, even after removing outliers at the 99th percentile. Time intervals were log-transformed, which generally resulted in normal distributions. To test the null hypothesis that the total mandatory federal processing time was 225 days on average, one-sample Wilcoxon signed rank tests were run on non-normal data, and one-sample t-tests were run on the few time interval datasets that were found to be normally distributed, along with the log-transformed data. Time interval data was analyzed overall, by fiscal year, and by USACE District. Regression analyses were used to test whether fiscal year or number of banks processed in a District had a statistically significant effect on processing time. Multiple data visualizations were created in R and Excel to show the range in processing time for mandatory federal processing (and the steps within that - prospectus, draft instrument, and final instrument processing), total federal processing, and the variation of these time intervals based on fiscal year and District.

-
20. For those unfamiliar with R, see background here: <https://www.r-project.org/about.html>
 21. Razali and Wah, 2011. Power comparisons of Shapiro–Wilk, Kolmogorov–Smirnov, Lilliefors and Anderson–Darling tests. *Journal of Statistical Modeling and Analytics*. 2 (1): 21–33. [Link](#). USACE 2014.
 22. Feng et al., 2014. Log-transformation and its implications for data analysis. *Shanghai Archives of Psychiatry*, vol 26(2), p.105-109. Section “2.1. Using the log transformation to make data conform to normality”. [Link](#).
-

Findings

This section reviews the results of analyses conducted to answer the research questions noted below. The section also includes insights tangential to our research questions such as our observations about data entry errors.

Findings in this section are categorized by the following research questions:

1. Are actual federal mandatory mitigation bank instrument approval timelines meeting the 225-day requirement in the 2008 Rule?
2. Are there stages in the process where delays are found more often?
3. Are approval timelines trending faster or slower over time?
4. Which Districts have average timelines in the first and fourth quartiles?
5. Which individual mitigation banks had average timelines in the first and fourth quartiles?
6. Is there a difference in processing times between banks and ILF programs?

Are actual mandatory federal mitigation bank instrument approval timelines meeting the 225-day requirement in the 2008 Rule?

No, on average the mandatory federal process timeline of 225 days is not being met, based on the timelines of 496 mitigation bank instruments approved between fiscal years 2014 - 2021 (recall that outliers at the 1st and 99th percentile have been removed). Results are statistically significant (p-value < 0.01, both from the Wilcoxon test on the non-normal, non-transformed data; and with one sample t-test on the log-transformed data).

Summary statistics were created for Mandatory federal, Sponsor, Additional, and Total processing. The average mandatory federal timeline was 336 days and the median was 281 days (Table 7). **Processing a mitigation bank instrument takes 1.5x longer than required in regulations** on average. The fastest (first) quartile of mandatory federal approval processing was between 54 - 185 days, and the slowest quartile was between 415 - 1,446 days. Interpreting the data on a positive note, the first quartile indicates that 25% of MBIs were approved in <185 days, and the median indicates that 50% of MBIs were approved in <281 days.

Table 7. Timeline Range to Approve Mitigation Bank Instruments

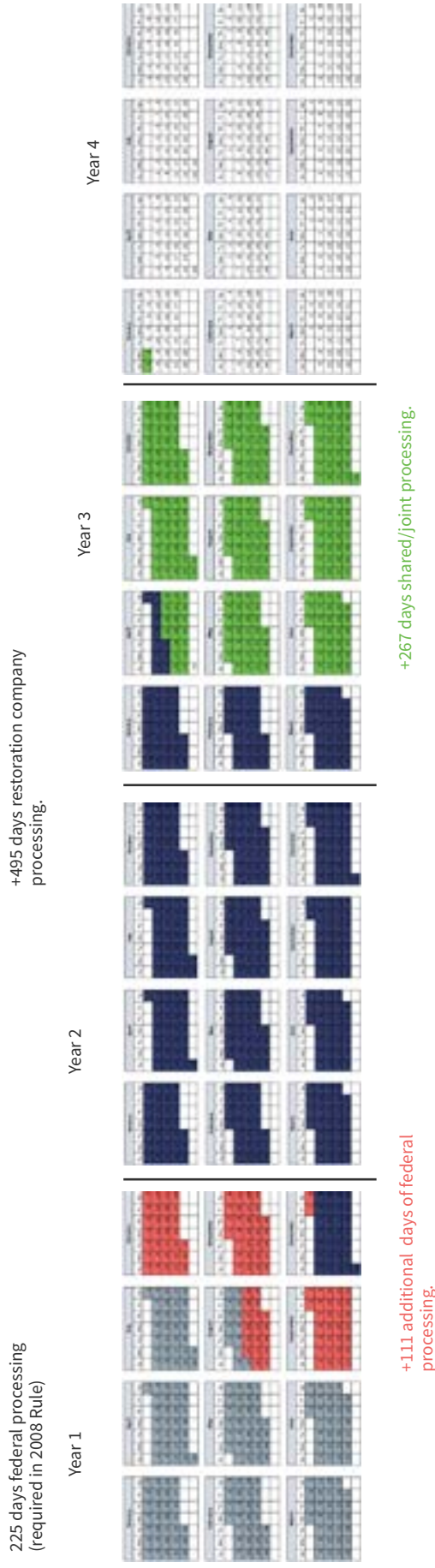
	Min	1st Quartile	2nd Quartile (Median)	Average	3rd Quartile	Max
Mandatory Federal	54	185	281	336	415	1,446
Sponsor	0	199	361	495	629	3,330
Additional	0	36	142	268	324	2,877
Total	78	618	895	1,099	1,428	4,437

Only mandatory federal approval process time is included in the 225-day requirement; **sponsor processing time adds 495 days and additional processing time adds 268 days on average to the overall timeline - that's an extra 25 months total** (Table 7). The fastest quartile of approvals *by total time* was between 78 and 618 days, and the slowest quartile was between 1,428 and 4,437 days (Table 7).

This extra 25 months of processing time could be due to any number of reasons from the project stalling on the sponsor's end (for example while property title is secured or restoration planning is further developed), to back-and-forth between the sponsor and the USACE District to ensure completeness of documentation, or other reasons that are not captured in the data. To visualize the scale of timeline approvals, we show the thumbnails of calendars below - gray indicates the 225-day timeline in the 2008 Rules, dark pink indicates mandatory processing days beyond the mandatory federal timeline, blue indicates sponsor processing, and green indicates additional time (Figure 6). **Note that 'additional' processing time may be underestimated, as 53% of MBI records (n=264) do not record time intervals** between receipt of a draft prospectus through USACE deeming it complete &/or receipt of draft instrument and determining it complete.

Figure 6. Total Average Time to Approve Mitigation Bank Instruments

See Figure 15, Appendix for Full-Size Figure



Are there stages in the process where delays are found more often?

Within the total 225-day timeline requirement, there are also timelines set for the three stages of approval (90 days to review the prospectus, 90 days for draft instrument, 45 days for final instrument). The final instrument approval process *did not* meet the 45-day timeline on average (statistically significant, p-value <0.01, using Wilcoxon test on non-transformed data), while the other stages met their timelines on average. The final instrument approval process saw delays the most, although all stages had a wide range of processing days (Figure 7). In all fiscal years, **processing of the final instrument takes on average 2+ times longer than the 45 days required** in regulations (Figure 8).

Figure 7. Timeline Range for Stages in Federal Mandatory Processing of MBIs

Horizontal lines indicate the timeline for stages indicated in the 2008 Rule: 90 days for Prospectus (dark blue) and Draft Instrument (green), and 45 days for Final Instrument (gray). A refresher on boxplots: the bottom of the box indicates the 1st quartile (25% percentile), the line inside the box indicates the median, the top of the box indicates the 3rd quartile (75% percentile), and dots outside the box indicate outliers.

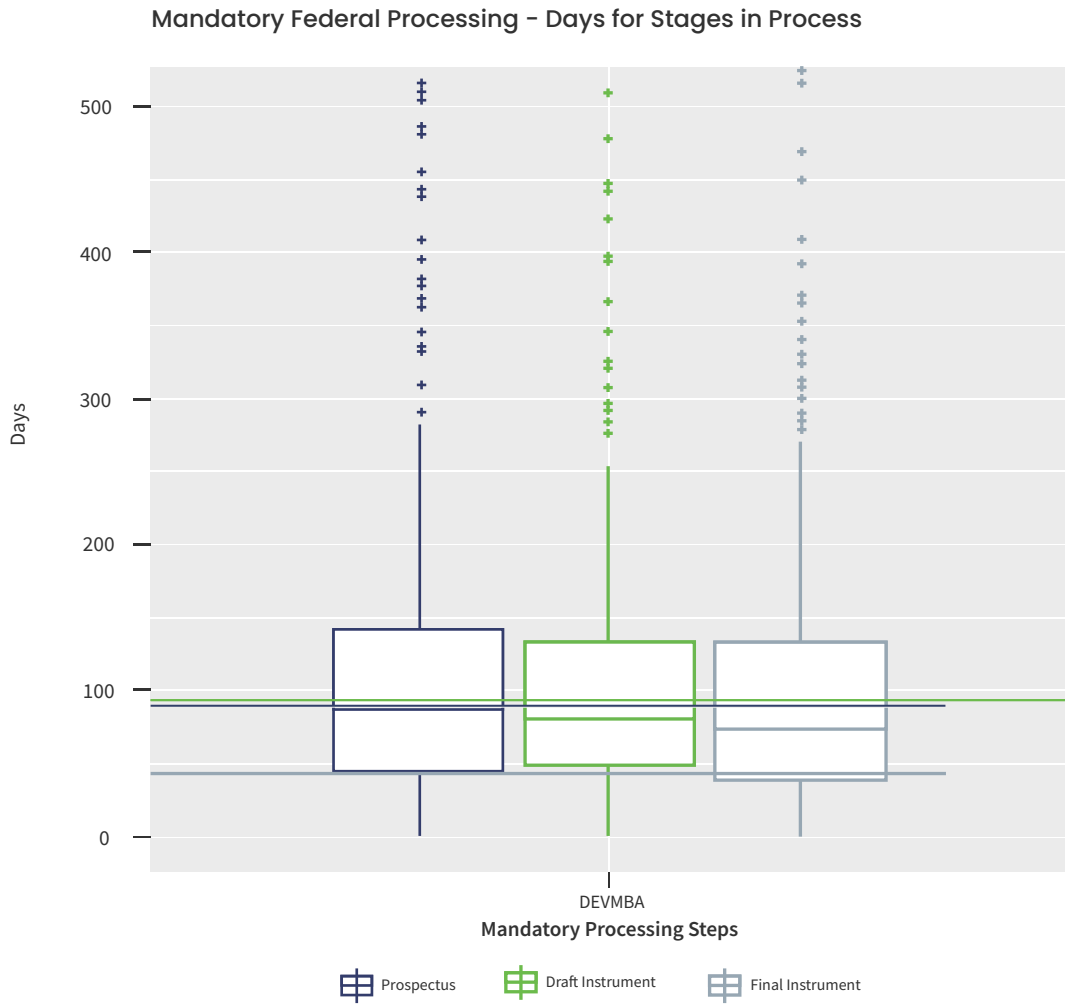
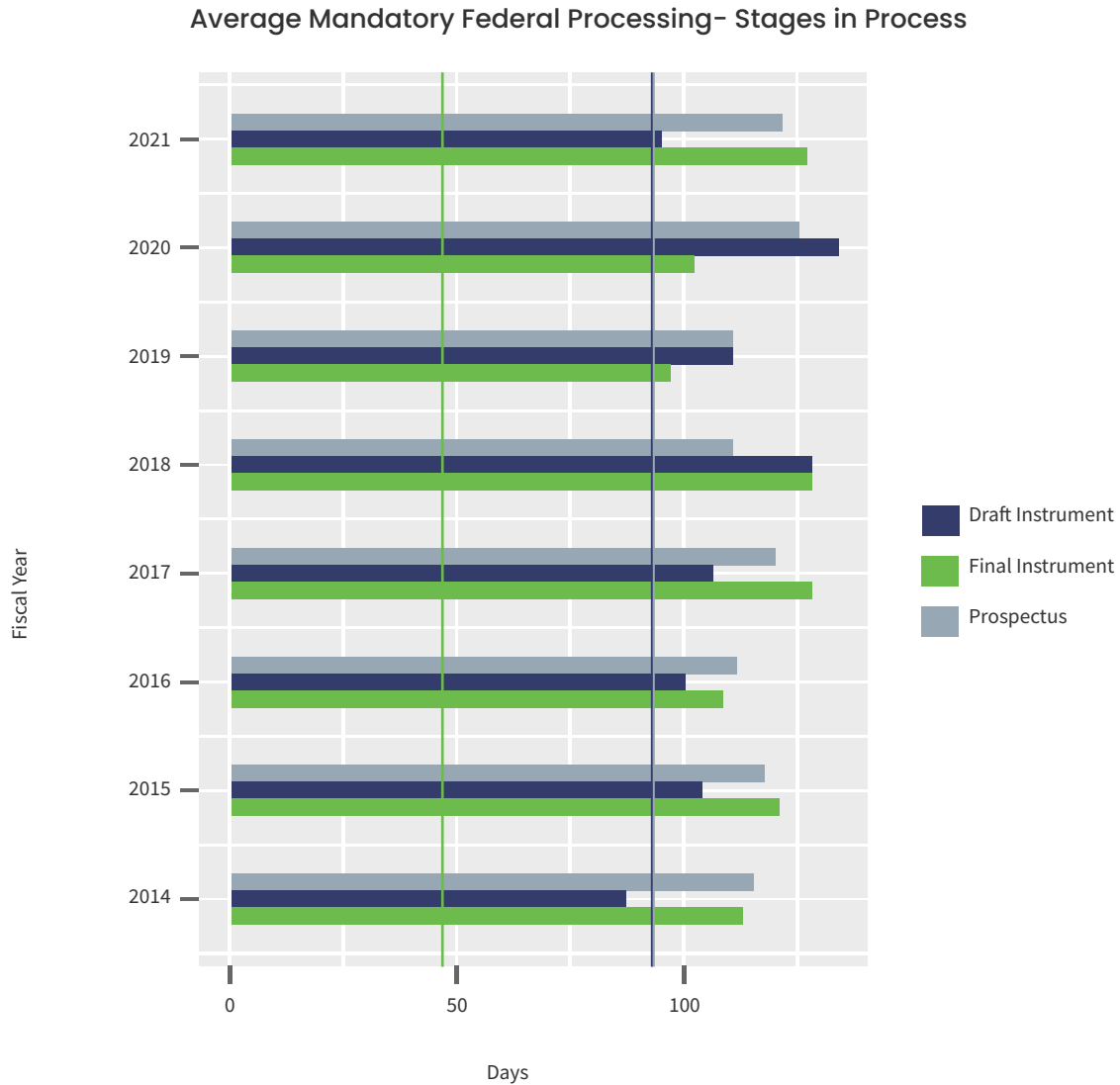


Figure 8. Timelines for Stages in Federal Mandatory Processing of MBIs – by Fiscal Year

Vertical lines indicate the timeline for stages indicated in the 2008 Rule: 90 days for Prospectus (gray) and Draft Instrument (blue), and 45 days for Final Instrument (green)

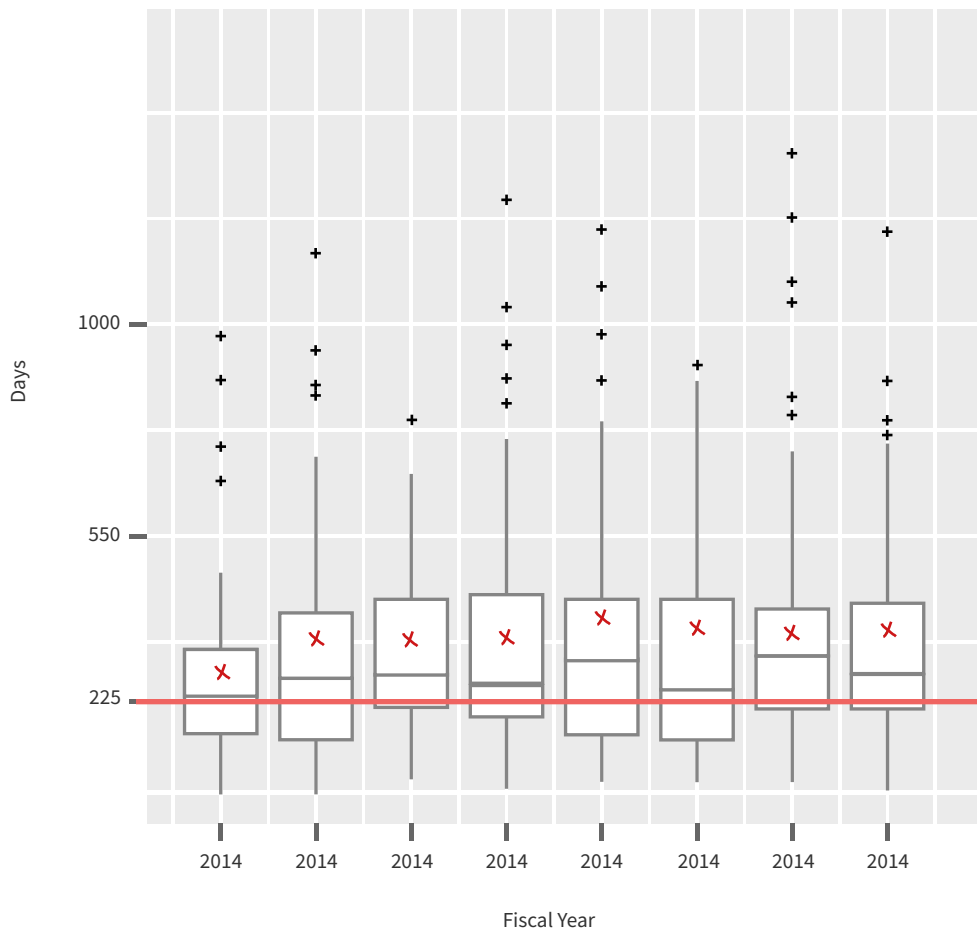


Are approval timelines trending faster or slower over time?

There is no statistically significant relationship in approval timelines either getting faster or slower over time (Figure 9). Between fiscal years 2014-2021, the average mandatory federal timeline met the 225-day requirement only in 2014. For all other years, the average timeline was statistically different than 225 days (p-value <0.01, see summary of all statistical tests based on fiscal year in Table 11. Summary of One-Sample Statistical Tests, in the Appendix section).

Figure 9. Timeline of Federal Mandatory Processing of MBIs by Fiscal Year

The red line indicates the 225-day timeline required in the 2008 Rule, and the red x indicates the mean (average).



Which Districts have average timelines in the first and fourth quartiles (by mandatory federal processing, and by total processing)?

As noted above, the fastest quartile of **mandatory federal processing** was between 54 - 185 days, and the slowest quartile was between 415 - 1,446 days. Figure 9 shows the range of mandatory federal processing times in all Districts, with the first and fourth quartiles indicated by blue and dark pink boxes respectively, Districts with average mandatory federal processing <225 days indicated by a green box, and the average time per District indicated by the red X.

By average mandatory federal processing time, the fastest quartile Districts are: Mobile, San Francisco, and Tulsa. The slowest quartile Districts are Detroit, Kansas City, New York, Fort Worth, Jacksonville, and Albuquerque.

Although these findings are based on the largest aggregation of data about approval timelines to date, a few **caveats** are worthy of reflection:

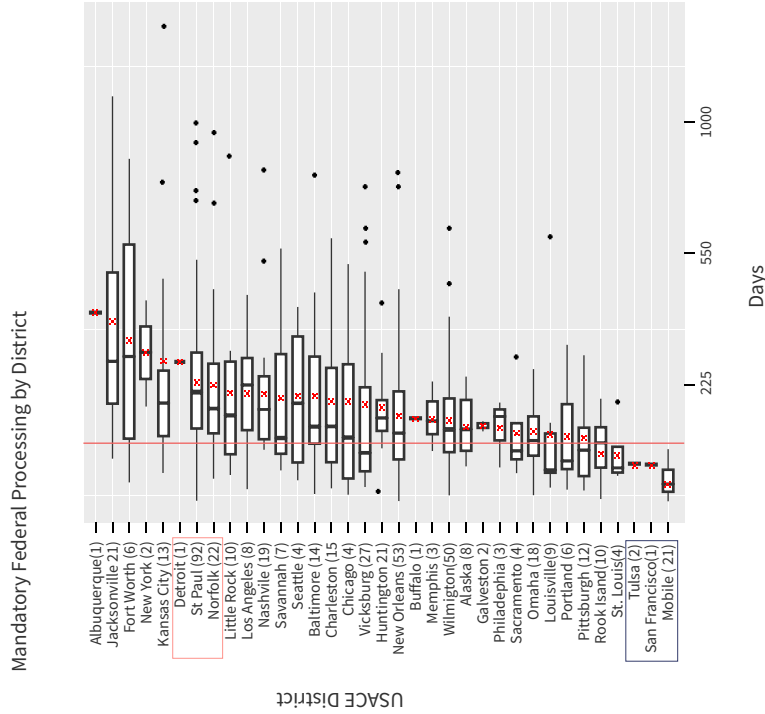
- Six Districts have at least 33% fewer MBI entries in ORM than in RIBITS (see Table 4). For example, Galveston indicated 12 approved banks in RIBITS but only 6 in the raw ORM data (4 of which were removed due to time errors). Missing records - and records removed due to data entry errors - means an incomplete representation of timelines in our analysis, particularly for these Districts.
- “Fast” or “slow” averages may be misleading because some Districts like San Francisco only approved one bank (between FY14-21). By just removing one outlier record, the average federal mandatory processing in Tulsa went from 688 days to 164 days, and 728 days to 362 days in Savannah (see Table 10, Appendix).
- Several districts including Sacramento, San Francisco, and Seattle regularly process multiple benefit banks which involve multiple regulatory authorities including 404 CWA, ESA, and Magnuson-Stevens Act. These multiple authority banks are inherently more complicated than single authority banks, but our data makes no indication of whether MBIs are for multiple benefits.

Six Districts averaged less than 225 days for mandatory federal processing of MBIs: Mobile, San Francisco, Tulsa, St. Louis, Rock Island, and Pittsburgh. Nine Districts approved 50% of MBIs (e.g., the *median*, indicated by the bar in the middle of the boxplots) in less than 225 days: Mobile, Louisville, St. Louis, San Francisco, Tulsa, Portland, Vicksburg, Sacramento, and Pittsburgh (Rock Island was close, with an average of 226 days).

The numbers in parentheses in Figure 10 indicate the number of banks approved between fiscal year 2014 - 2021. Because many of the Districts in this chart approved fewer than 10 banks and could overemphasize results where little activity was occurring, we plotted data for the 16 Districts that approved more than 10 banks (Figure 10, bottom). One might posit that there is a relationship between the number of banks approved in a District and the timeline for mandatory federal processing, but we did not find a statistically significant relationship based on a regression analysis.

Figure 10. Timeline of Average Federal Mandatory Processing of MBIs by District – All Districts (top), and Districts that Approved 10 or More MBIs (bottom)

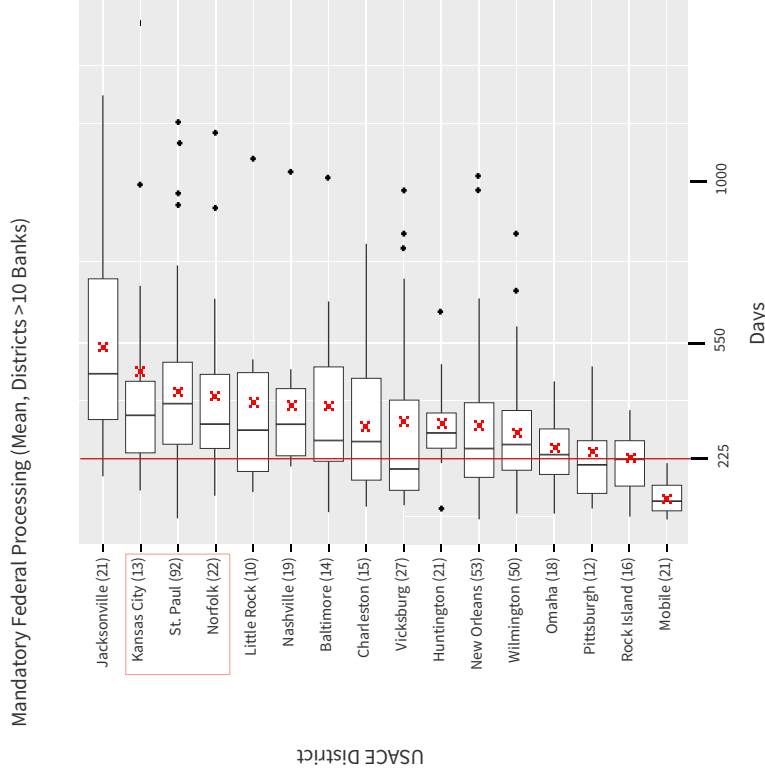
Districts are ordered from shortest average timeline at the bottom to longest average timeline at the top. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021. The red line indicates the 225-day timeline required in the 2008



With regard to **total processing time** by District, the fastest quartile of approvals by total time was between 78 and 618 days, and the slowest quartile was between 1,428 and 4,437 days (Table 7 above). By total processing time, the fastest quartile Districts are: Pittsborough, Rock Island, Tulsa, and Memphis. The slowest quartile Districts are: Norfolk, Seattle, Charleston, Los Angeles, Jacksonville, Kansas City, and Detroit.

ORM data for over half of MBI records did not show 'Additional' time

Rule, and the red x indicates the mean (average). The blue box indicates Districts in the 1st (shortest) quartile, and the dark pink box indicates the 4th (longest) quartile.



intervals. The same is generally true when we look at the data by District. However, there were a handful of the Districts processing over 10 MBIs where data included 'Additional' time intervals for more than 75% of MBIs: Charleston, Mobile, and New Orleans. These are Districts for which Additional time may be more appropriately factored into overall processing to better estimate approval timeframes (Figure 11).

Figure 11. Timeline of Total Processing of MBIs by District – All Districts that Approved 10 or More MBIs (bottom)

Districts are ordered from shortest average total processing at the bottom to longest timeline at the top. The blue box indicates Districts in the 1st (shortest) quartile, and the dark pink box indicates the 4th (longest) quartile. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021. Note that most Districts omit 'Additional'

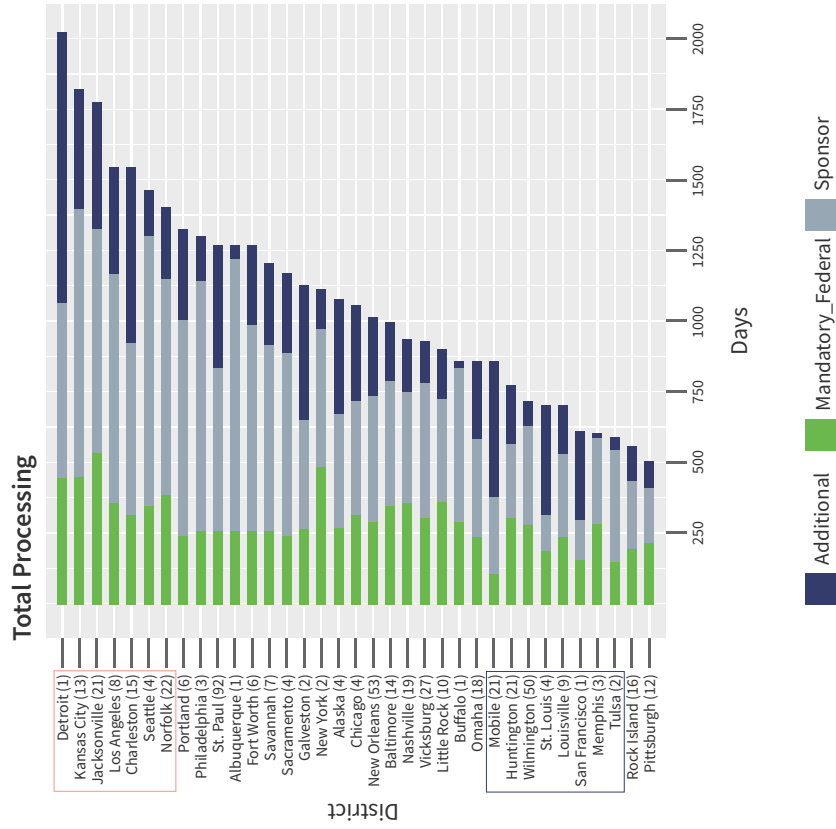
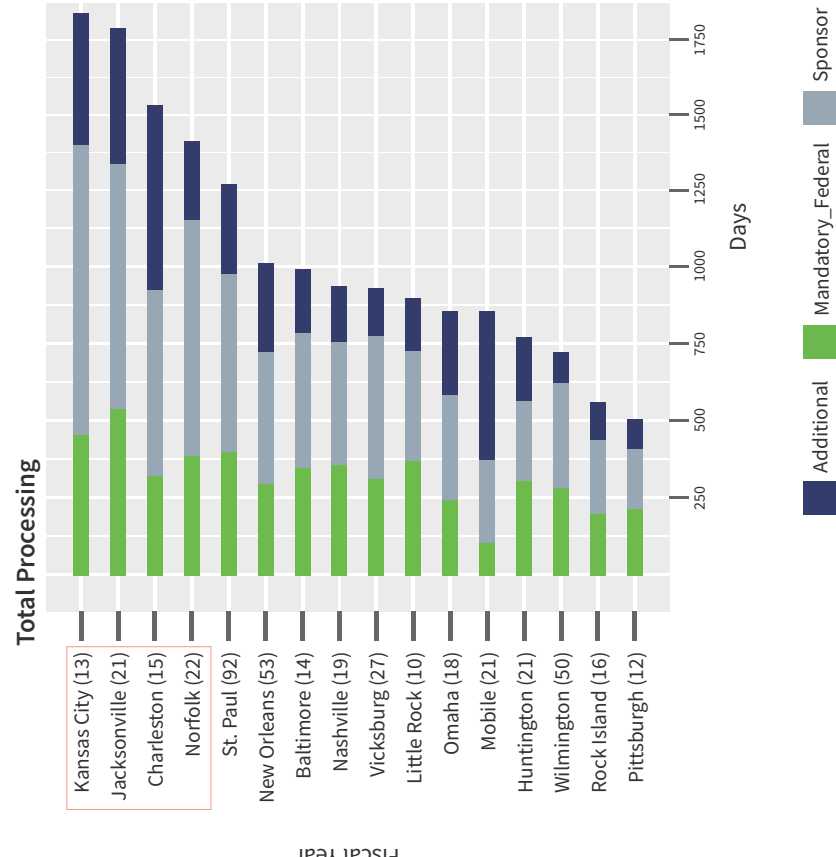


Figure 11. Timeline of Total Processing of MBIs by District – All Districts that Approved 10 or More MBIs (top)

Districts are ordered from shortest average total processing at the bottom to longest timeline at the top. The blue box indicates Districts in the 1st (shortest) quartile, and the dark pink box indicates the 4th (longest) quartile. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021. Note that most Districts omit 'Additional'



time intervals for 50% or more of their MBIs. The exceptions for Districts processing more than ten banks are: Charleston, Mobile, and New Orleans. These are Districts for which 'Additional' time may be more accurate.

Tables of processing time by District (average and median timelines, sorted alphabetically, by mandatory federal time, and by total time)

are available in the Appendix (Tables X - X).

Which individual mitigation banks had average timelines in the first and fourth quartiles?

A full table of MBIs, including an indication of first and fourth quartiles of timelines for mandatory federal processing and total processing is included in the Appendix (Table 18); 250 records fall in these categories. Figures 12 and 13 below show that while mandatory federal processing (indicated in green) may fall within the 225-day deadline, the ‘extra’ Sponsor and Additional timeline can add significant time to the approval process.

Figure 12. 25 Fastest MBI Approvals by Total Processing Time

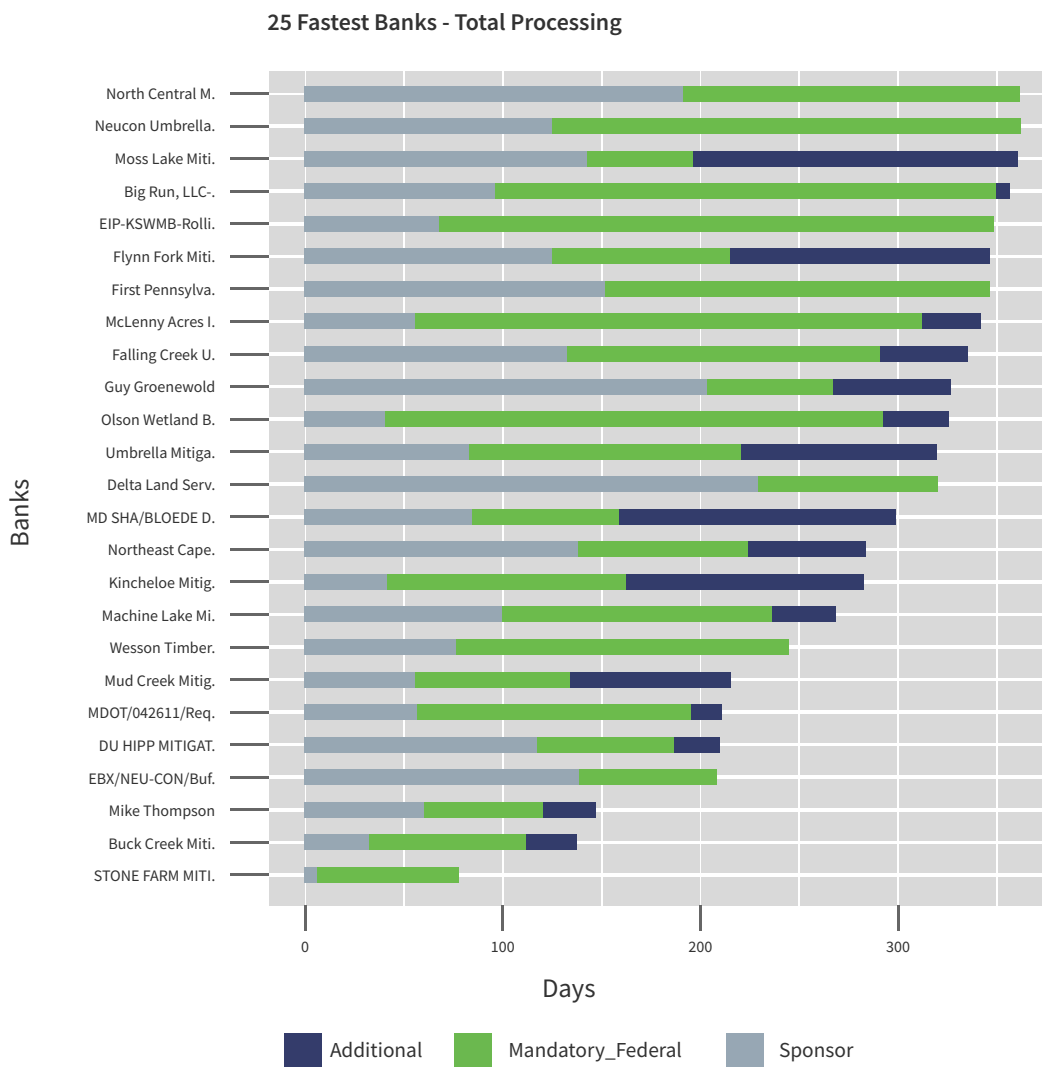
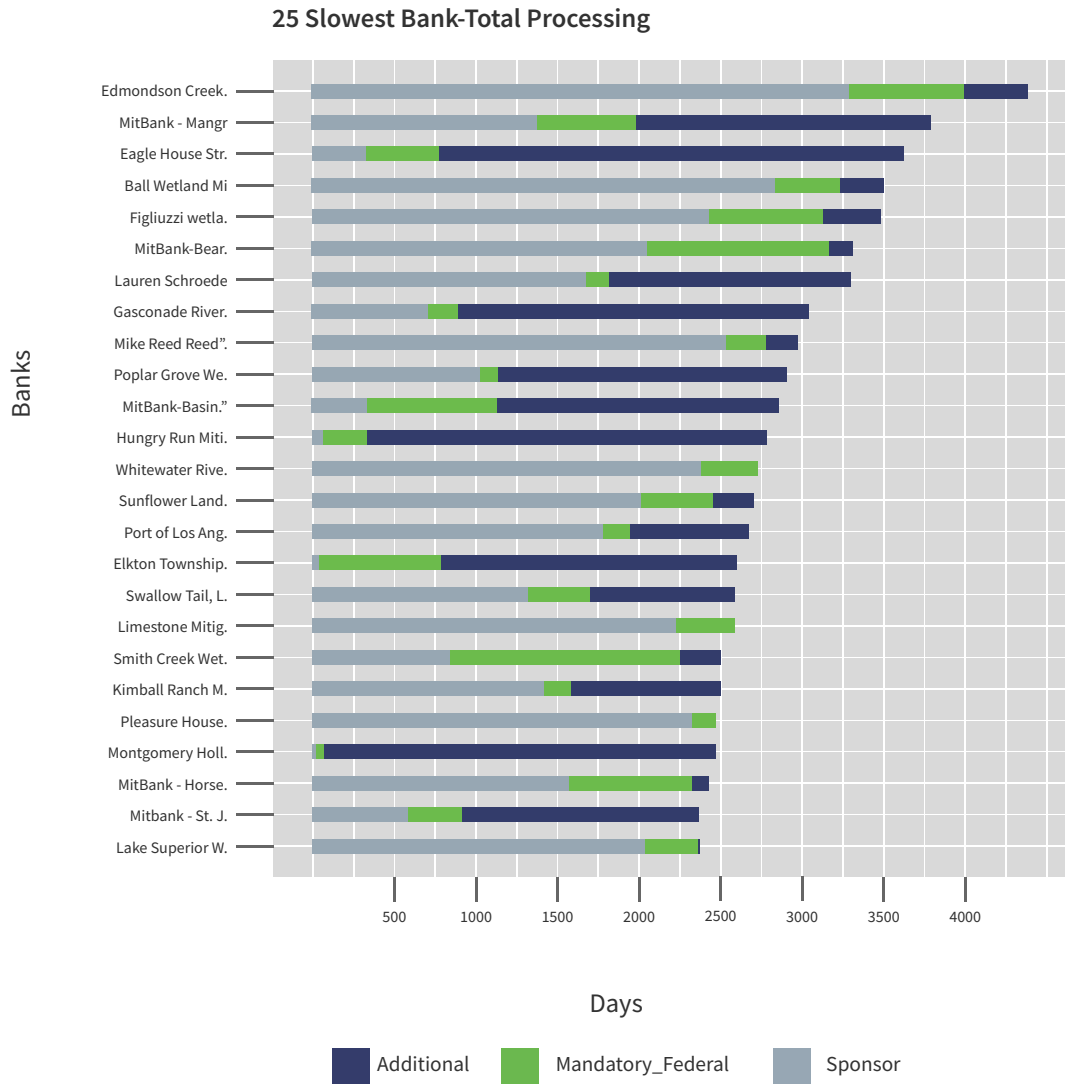


Figure 13. 25 Slowest MBI Approvals by Total Processing Time



Is there a difference in processing times between MBIs and ILF programs?

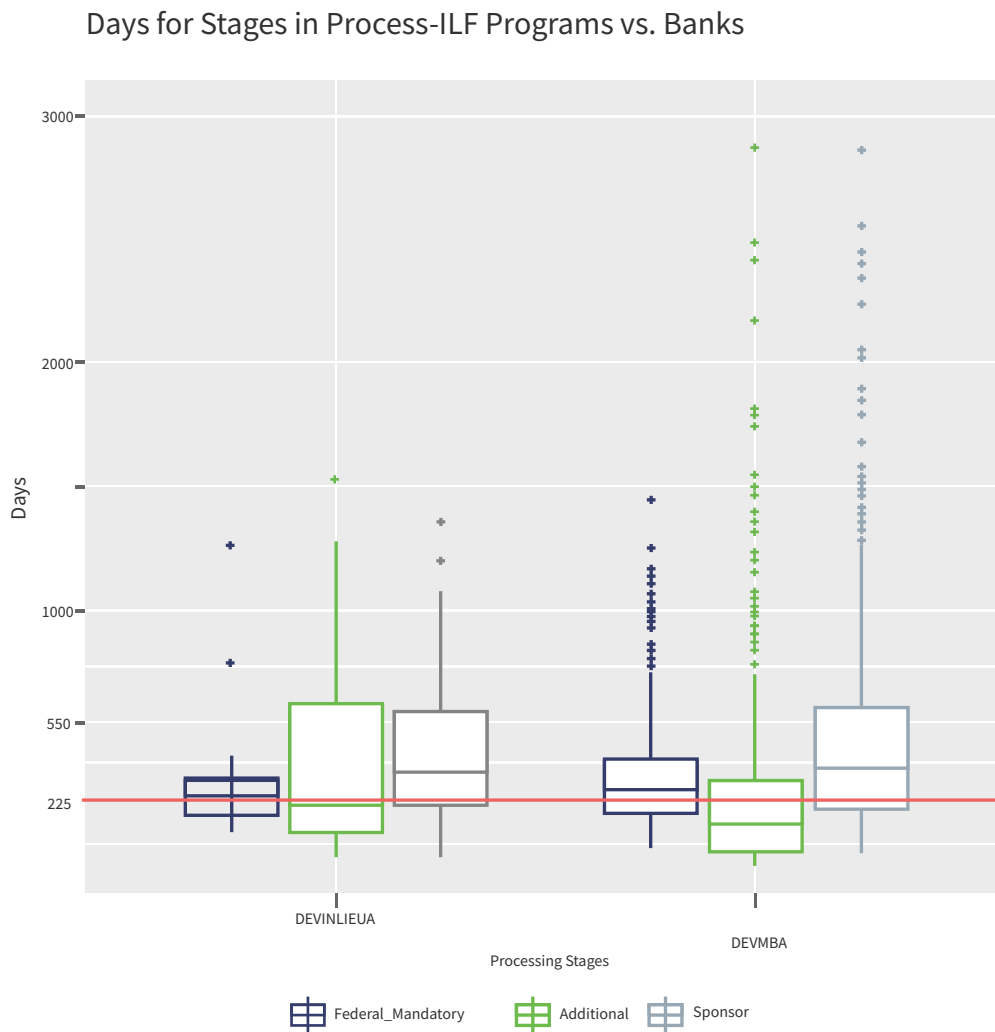
From a small sample of ILF programs (n=32), we did not find large differences in average processing time between ILF programs and mitigation banks (Table 7), although banks had a larger spread of processing timelines (Figure 14).

Table 8. Timeline Range (in Days) - Mitigation Bank Instruments vs. ILF Programs

	Banks (n=496)	ILF Programs (n=32)	Banks (n=496)	ILF Programs (n=32)
	Mean		Median	
Mandatory Federal	336	327	281	259
Sponsor	495	467	361	354
Additional	268	380	142	196
Total	1,099	1,174	895	1,179

Figure 14. Timelines for Stages in Federal Mandatory Processing – MBIs vs. ILF Programs

Lines indicate the timeline for stages indicated in the 2008 Rule: 90 days for Prospectus (dark blue) and Draft Instrument (green), and 45 days for Final Instrument (gray).





Discussion

This section includes a compilation of the findings, recommendations indicated by the data analysis, and next steps.

Compilation of Findings

- The mandatory federal process timeline of 225 days is not being met, based on the average timelines of 496 banks approved between fiscal years 2014 - 2021. Results are statistically significant (p-value < 0.01).
- Mandatory federal processing of a mitigation bank instrument takes 1.5x longer than required in regulations on average. The average mandatory federal timeline was 336 days and the median was 281 days (Table 7). The fastest quartile of approvals was between 54 - 185 days, and the slowest quartile was between 415 - 1,446 days (not including outliers at the 1st percentile and 99th percentile). Interpreting the data on a positive note, the first quartile indicates that 25% of MBIs were approved in <185 days, and the median indicates that 50% of MBIs were approved in <281 days.
- Only mandatory federal approval process time is included in the 225-day requirement; sponsor processing time adds 495 days and additional processing time adds 268 days on average to the overall timeline - that's an extra 25 months total (Figure 6 and Table 7). The fastest quartile of approvals *by total time* was between 78 and 618 days, and the slowest quartile was between 1,428 and 4,437 days (not including outliers at the 1st percentile and 99th percentile, respectively).
- 'Additional' processing time may be underestimated or highly variable. 21% of MBI records (n=106) do not record the time interval between receipt of a draft prospectus through USACE deeming it complete, indicating they may not 'start the clock' until a complete prospectus is received. 44% of MBI records (n=214) do not record the time interval between receipt of a draft instrument and deeming it complete, which could be because the draft instrument was complete, or it could also be because the time is not recorded until a complete draft instrument is received. ORM data provided did not indicate the time of receipt of a draft final instrument, so another 'Additional' time interval may not be captured.
- Within the total 225-day timeline requirement, there are also timelines set for the three stages of approval (90 days to review the prospectus, 90 days for draft instrument, 45 days for final instrument). The final instrument approval process did not meet the 45-day timeline on average (statistically significant, p-value <0.01). The final instrument approval process sees delays the most. In all fiscal years, processing of the final instrument takes on average 2+ times longer than the 45 days required in regulations (Figure 7 & 8, in the 'Findings' section). This approval stage could potentially be longer because the receipt of the draft final instrument is not recorded in ORM, meaning that any back-and-forth between the Sponsor and the District to ensure completeness of the final instrument could be included as Mandatory federal processing (final instrument stage).

- Six Districts averaged less than 225 days for mandatory federal processing of MBIs: Mobile, San Francisco, Tulsa, St. Louis, Rock Island, and Pittsburgh (Figure 10). Nine Districts approved 50% of MBIs in less than 225 days: Mobile, Louisville, St. Louis, San Francisco, Tulsa, Portland, Vicksburg, Sacramento, and Pittsburgh (Rock Island was close, with an average of 226 days). One might posit that there is a relationship between the number of banks approved in a District and the timeline for mandatory federal processing, but we did not find a statistically significant relationship based on a regression analysis.
- Most Districts omit 'Additional' time intervals for 50% or more of their MBIs. The exceptions for Districts processing more than ten banks are: Charleston, Mobile, New Orleans, Nashville, and Little Rock. These are Districts for which 'Additional' time may be more accurate (Figure 11).
- There is no statistically significant relationship in approval timelines either getting faster or slower over time (Figure 9).
- From a small sample of ILF programs (n=32), we did not find large differences in average processing time between ILF programs and mitigation banks (Table 7), although banks had a larger spread of processing timelines (Figure 14).

Aside from the findings related to the main research question, we also have some **general observations based on the data**. Eighty-one records were not used because of indications of data entry errors (e.g., four or more of the same date entered in the time intervals, or four or more blank time intervals). This, along with the eight banks with federal approval times of less than 60 days (the 1st percentile outliers, and in our professional opinion unachievable), suggests that there is a moderate amount of data entry errors. Overall, 11% of the original MBI data records were removed due to time errors and 53% of the remaining MBI data did not record 'Additional' processing steps). Although the ORM database includes the option to include a delay code, this function has not been used. Therefore, a coarse quantitative analysis of factors causing delays in federal mandatory approval timelines is not possible using existing ORM data.

Recommendations Indicated by the Data Analysis

The recommendations herein are solely based on findings from the data analysis.

- ▶ **The 225-Day Timeline is not Being Met, and the USACE Should Identify Opportunities for Improving Performance in Approval Processes.** The data analysis does not directly point to a recommendation, but we suggest the Corps consider opportunities for addressing this such as analyzing whether Districts have sufficient tools and provide training for facilitating bank and ILF instrument development (e.g., template prospectus and template instruments), regularly scheduled IRT meetings, or adequate training on managing the instrument approval process.
- ▶ **Using Delay Codes in ORM Will Help Adaptive Management.** The data currently only show that delays are happening, and do not indicate *why*. ORM already includes delay codes, so no change to the infrastructure is needed. Using delay codes could help identify factors associated with slower timelines and bring delayed projects to the surface more easily, helping troubleshoot issues more readily. Examples of delay codes that could be used: endangered species consultation, historic property coordination, government to government consultation, or lack of sufficient information to make a decision on proposed instruments.
- ▶ **ORM Data Entry Error Would be Improved with Automated Flags.** Many online forms and data entry tools automatically detect potential data entry errors such as having a finish time before the start time, having multiple time interval fields with the same date, having an incongruously short time interval (e.g., an MBI approval of less than 60 days), or leaving important fields blank. This functionality could reduce the number of errors in the database.
- ▶ **USACE Training, Guidance And/Or Consistency Would Aid Data Entry of ILF Programs and Projects.** The discrepancy identified between RIBITS and ORM ILF data (see Methodology section) could be addressed with a consistent and required guidance for USACE tracking of ILF projects in ORM.
- ▶ **'Additional' Time Intervals are Problematic and Should be Addressed.** The following time intervals include both sponsor time and federal review time with no distinction between the two in the data: the time between receipt of a draft prospectus through USACE deeming it complete, and the time between receipt of a draft instrument and USACE deeming it complete. A further refined 'check in/check out' option could provide this distinction. Currently, these time intervals are not recorded in 53% of MBI records. The data does not indicate why this is the case. Furthermore, there is no 'timestamp' indicating the time between receipt of a draft final instrument and USACE deeming it complete, which could erroneously count time spent by the sponsor towards the 225-day timeline.
- ▶ **USACE Mission Success Criteria 5.1 Should Remove 'Sponsor' Time from its Metric.** The metric for the USACE's mission success criteria 5.1 is based on total time, but this includes time that the USACE is not responsible for. USACE should consider removing 'sponsor' time from the metric. Furthermore, if it were possible to distinguish and only include USACE's portion of 'additional' time (per the previous recommendation), the metric could better reflect the time under USACE's control.

▶ **USACE Should Create Automated Reporting of Performance on 225-Day Timeline to Stakeholders.** The data is available to track and report performance on the 225-day regulatory requirement but has not been publicly reported to date. Our use of R programming for analysis provides proof that computer code could be written to regularly and efficiently run analyses for internal adaptive management and external transparency to stakeholders. The State of Virginia’s recently launched Permitting Evaluation and Enhancement Program (PEEP) is another example of tracking and automated reporting of target timeframes. PEEP is an online platform that provides transparency to the permittee as well as the public about where a permit is in the approval process, including when it was received, whose desk it’s on now (including coordination with external agencies like USACE when applicable), and how much time the steps in the process are taking vs. target timeframes.

▶ **Create Database Syncing to Ensure that ORM and RIBITS Data Agree.** An attempt to validate a random sample of ORM time interval data with RIBITS data found that the two datasets do not agree. For example, six Districts have at least 33% fewer MBI entries in ORM than in RIBITS. In addition, Corps staff have to enter information into each system, increasing the chance of errors and inconsistencies. USACE could investigate opportunities to further sync ORM and RIBITS data.

23. Personal communication, 2022

24. Virginia Department of Environmental Quality, 2022. Permitting Enhancement and Evaluation Platform (website). Accessed January 2023. [Link](#).

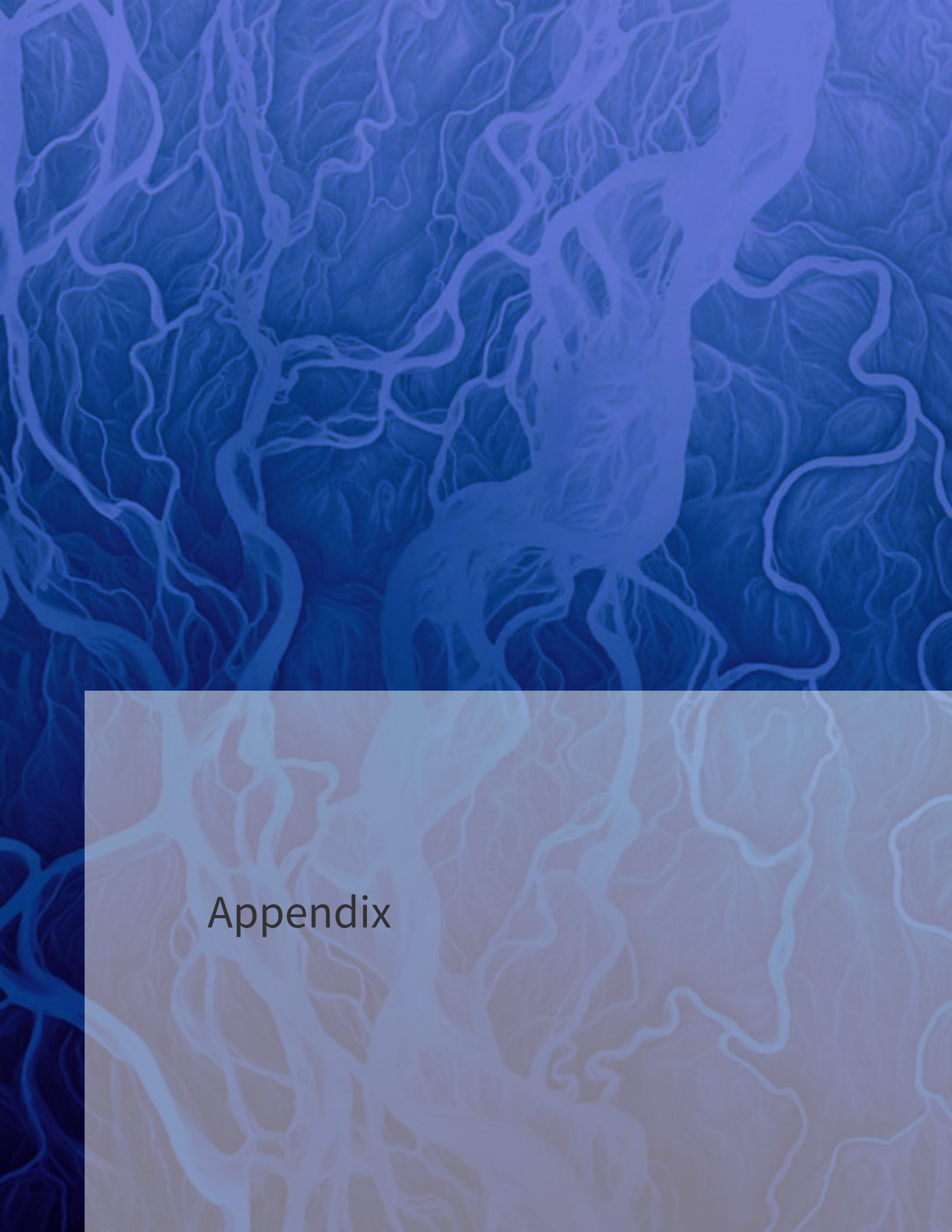
25. Madsen, 2022. “If You Can Track a Pizza, You Can Track a Permit” (blog). [Link](#).

Next Steps

This is the first quantitative analysis published on mitigation bank instrument approval timelines obtained from the USACE ORM database. The findings can be used by stakeholders in the MBI approval process to understand what the data is showing about specific Districts or individual banks. While the data quantitatively show that the 225-day required timeline in the Rule is not being met on average, **this analysis is not just about identifying missed timelines, but about taking the first step in adaptive management.** If the only information available is opinions like “It’s too slow!,” stakeholders may dig in about whether this is true or not based on anecdotes rather than data. The results in this report are based on the most complete dataset compiled to date and provide a foundation for productive dialogue.

However, the data only reflects what is recorded and offers no details on what factors are influencing timelines - for better or worse. Qualitative research could identify which factors influence timelines such as those identified by Kihslinger et al., 2019, including: staff resources, availability of templates, project management tools or procedures, complexity of the project, experience of the sponsor, IRT methods for tracking comments and responses, IRT methods for determining agreement / dealing with disagreement, and more. Informational interviews with USACE District staff and sponsors focused on these topics could provide context and insight, particularly for Districts and banks in the upper and lower timeline quartiles indicated by this analysis.

Integration of results of quantitative analyses like this one and qualitative analyses of the bank approval process may lead to tools and approaches that facilitate future development of mitigation banks and ILF programs.



Appendix

Figure 15. Total Average Time to Approve Mitigation Bank Instruments (Full Size)

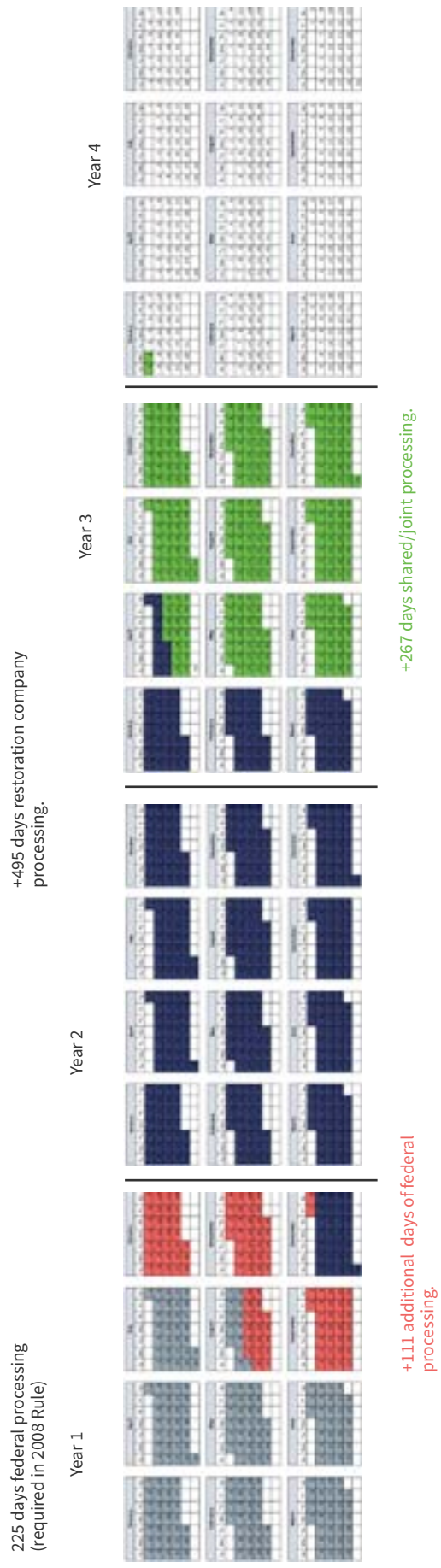


Figure 16. Timeline of Federal Mandatory Processing of MBIs by District (Full Size)

Districts are ordered from shortest average timeline at the bottom to longest timeline at the top. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021. The red line indicates the 225-day timeline required in the 2008 Rule, and the red x indicates the mean (average) for each District.

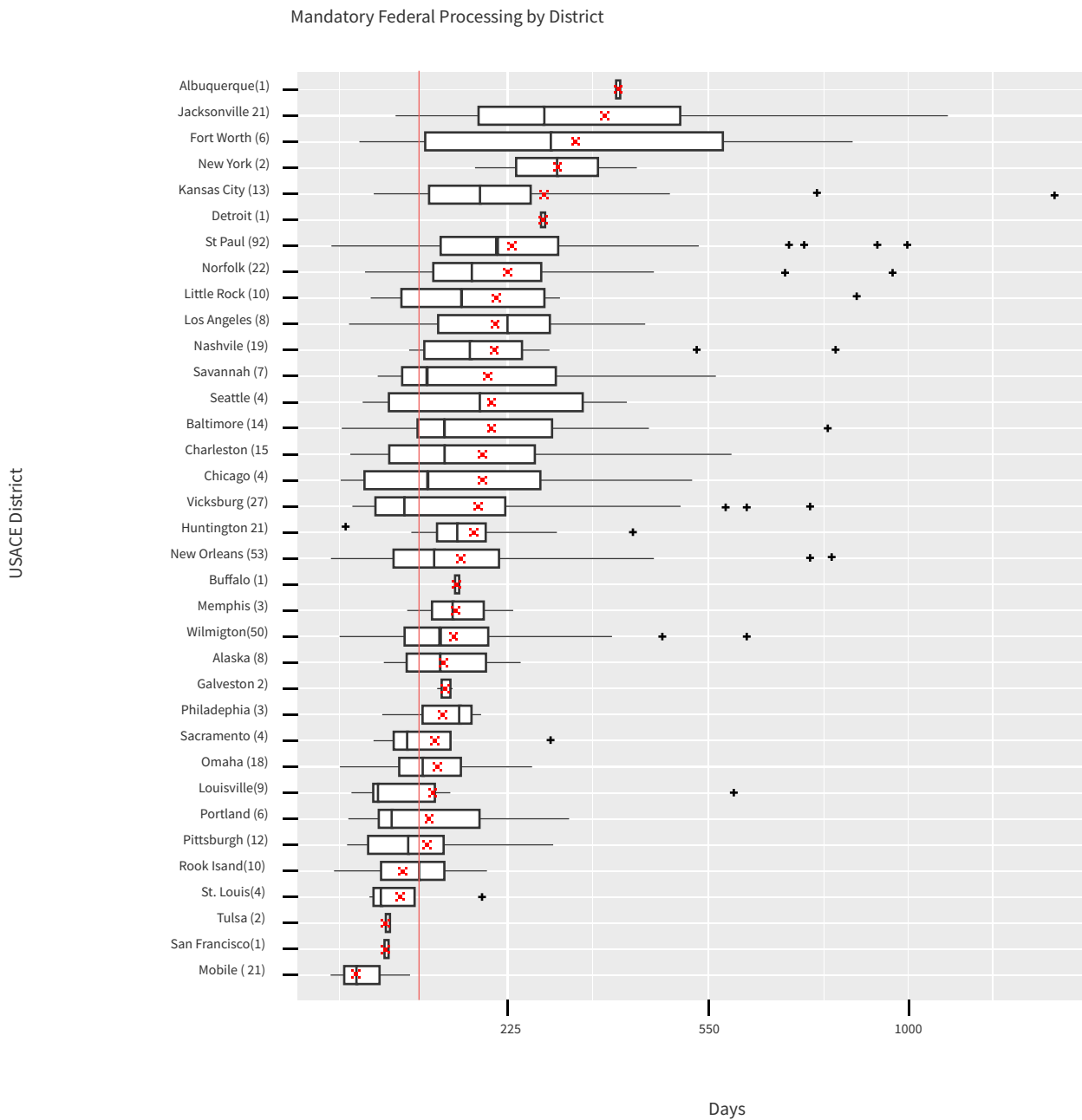


Figure 17. Timeline of Total Processing of MBIs by District (Full Size)

Districts are ordered from shortest processing at the bottom to longest timeline at the top. The number in parentheses indicates the number of MBIs approved in the District between fiscal year 2014 - 2021.

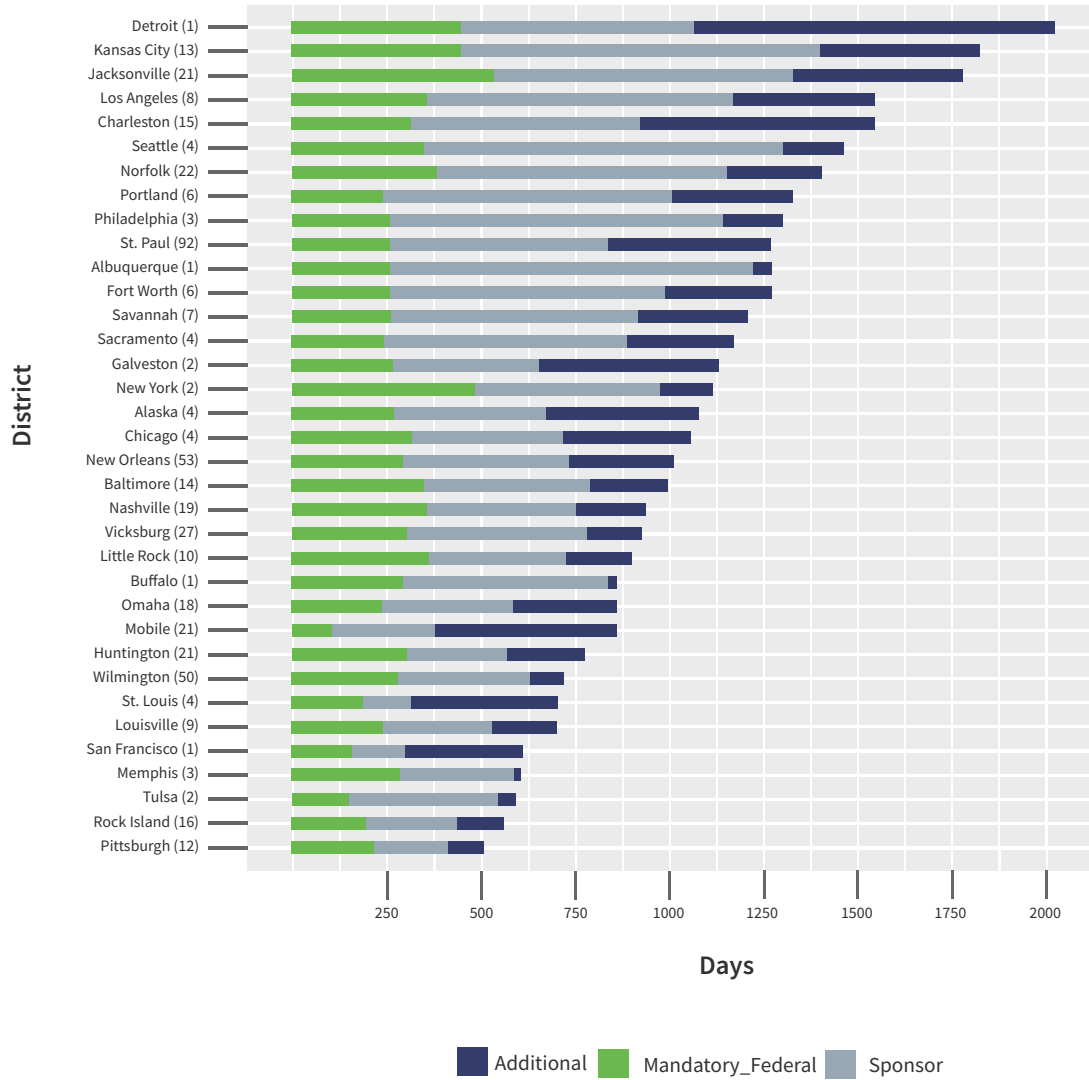


Table 9. National-Level Difference in Summary Statistics Before and After Data Cleaning

Before (in gray italics): Banks (n=603)
 After (in blue): Banks (n=496)

	Min	1st Quartile	2nd Quartile (Median)	Average	3rd Quartile	Max
Mandatory Federal	0	185	282	362	422	3,288
Mandatory Federal	54	185	281	336	415	1,446
Sponsor	0	199	363	496	634	3,330
Sponsor	0	199	361	495	629	3,330
Additional	0	36	144	272	330	2,877
Additional	0	36	142	268	324	2,877
Total	78	627	905	1,130	1,485	4,437
Total	78	618	895	1,099	1,428	4,437

Table 10. District-Level Difference in Summary Statistics Before and After Data Cleaning

Before (in gray italics), After (in blue)

District (# banks before, # banks after)	Total Mandatory Federal	Total Mandatory Federal	Total Additional	Total Additional	Total Sponsor	Total Sponsor	TOTAL	TOTAL
Little Rock (11, 10)	477	380	267	173	369	371	1,113	923
Mobile (22, 21)	108	112	477	490	300	276	885	877
Norfolk (24, 23)	367	396	298	260	772	784	1,437	1,440
Omaha (19, 18)	333	252	267	276	336	351	936	878
Savannah (8, 7)	728	362	327	300	560	575	1,615	1,237
St. Paul (96, 92)	485	410	297	298	584	593	1,366	1,300
Tulsa (3, 2)	688	164	56	43	703	397	1,448	604

ORM and RIBITS Cross-Validation Exercise

We wanted to verify the accuracy of the dates in ORM for complete prospectus and instrument approval. We used RIBITS (Regulatory In lieu fee and Bank Information Tracking System) and district Regulatory web pages as data sources for verification. Given the numbers of banks and ILF programs in our data set it was not feasible to examine every record. Instead, we conducted a 10% random sample of banks (51 records) and 20% of ILF programs (7 records). We examined each sampled record in RIBITS for the approval date as well as examining the associated cyber repository for copies of the prospectus, public notice, and final instrument. District web pages were examined for copies of the prospectus and public notice.

In 75% of the bank records (38 records) and 58% of the ILF programs (4 records) approval dates in RIBITS were in close agreement (7 days or less) with the ORM dates. Twenty percent of the bank records (10 banks) and 43% of ILF records (3 programs) had RIBITS approval dates that differed from ORM dates by 2 weeks to 7 months. Three bank records did not have approval dates in RIBITS or could not be found in RIBITS or on district web pages.

Complete prospectus dates were found in RIBITS or district web pages for 41% of the bank records sampled (21 banks) and 29% of ILF programs (2 programs). Nearly one half of those records were essentially in agreement (7 days or less) with the dates recorded in ORM for complete prospectus.

Forty percent of bank records (20) had a public notice for the prospectus in RIBITS or the district web page. Under the 2008 Mitigation Rule, a public notice must be issued within 30 days of the Corps receiving a complete prospectus (33 CFR 332.8(d)(4)/40 CFR 230.98(d)(4)). Thirteen records had public notices issued within 30 days of a complete prospectus.

Sixty one percent or 31 bank records and 100% of ILF records had a final instrument publicly visible in RIBITS.

It was remarkable that all bank records did not have a publicly visible final instrument in RIBITS. Those documents between the mitigation provider and the Corps are subject to Freedom of Information Act requests and making them publicly visible would potentially reduce the numbers of requests that districts must address. Additionally, any potentially confidential or proprietary information in these instruments could be redacted. Similarly, prospectus and associated public notices should be publicly visible in RIBITS and/or district webpages.

Table 11. Summary of One-Sample Statistical Tests to Determine if Average Mandatory Federal Processing Was Statistically Different from 225 Days, by Fiscal Year

Log Transformed?	Test	Fiscal Year	p-value	Statistically different than 225 days?
No	Wilcox	2014	>0.05	No
No	Wilcox	2015	<0.01	Yes
No	t test1	2016	<0.01	Yes
No	Wilcox	2017	<0.01	Yes
No	Wilcox	2018	<0.01	Yes
No	Wilcox	2019	<0.01	Yes
No	Wilcox	2020	<0.01	Yes
No	Wilcox	2021	<0.01	Yes
Yes	t test	2014	<0.01	Yes
Yes	t test	2015	<0.01	Yes
Yes	t test	2016	<0.01	Yes
Yes	t test	2017	<0.01	Yes
Yes	t test	2018	<0.01	Yes
Yes	t test	2019	<0.01	Yes
Yes	t test	2020	<0.01	Yes
Yes	t test	2021	<0.01	Yes

Table 12. Average Timelines by District - Ordered Alphabetically

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
Alaska (4)	97	86	95	278	412	414	1,104
Albuquerque (1)	56	29	523	608	48	643	1,299
Baltimore (14)	102	109	146	358	207	451	1,016
Buffalo (1)	214	50	37	301	20	560	881
Charleston (15)	119	89	123	331	612	617	1,560
Chicago (4)	49	40	238	327	353	408	1,087
Detroit (1)	184	119	161	464	981	625	2,070
Fort Worth (6)	143	214	177	534	266	476	1,276
Galveston (2)	70	109	96	275	487	397	1,159
Huntington (21)	90	102	124	316	210	266	792
Jacksonville (21)	204	215	131	550	452	812	1,815
Kansas City (13)	124	112	229	465	431	966	1,862
Little Rock (10)	112	125	143	380	173	371	923
Los Angeles (8)	122	180	71	373	378	828	1,579
Louisville (9)	42	118	88	247	175	297	720
Memphis (3)	45	146	109	300	7	308	615
Mobile (21)	11	24	76	112	490	276	877
Nashville (19)	146	98	127	371	186	405	962
New Orleans (53)	154	92	58	303	292	442	1,037
New York (2)	99	39	351	489	145	512	1,145
Norfolk (22)	101	100	195	396	260	784	1,440
Omaha (18)	58	86	107	252	276	351	878
Philadelphia (3)	63	70	133	266	134	904	1,304
Pittsburgh (12)	82	79	62	223	99	201	522
Portland (6)	69	48	131	247	301	782	1,330
Rock Island (16)	83	60	65	208	128	240	576
Sacramento (4)	114	98	43	255	292	651	1,198
San Francisco (1)	125	3	34	162	318	148	628
Savannah (7)	91	79	192	362	300	575	1,237
Seattle (4)	47	258	55	359	171	966	1,495
St. Louis (4)	27	109	59	195	400	128	722
St. Paul (92)	159	131	120	410	298	593	1,300
Tulsa (2)	38	47	79	164	43	397	604
Vicksburg (27)	75	118	126	318	153	481	952
Wilmington (50)	113	110	69	292	99	350	740

Table 13. Average Timelines by District - Ordered Shortest to Longest by Mandatory Federal Processing

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
Mobile (21)	11	24	76	112	490	276	877
San Francisco (1)	125	3	34	162	318	148	628
Tulsa (2)	38	47	79	164	43	397	604
St. Louis (4)	27	109	59	195	400	128	722
Rock Island (16)	83	60	65	208	128	240	576
Pittsburgh (12)	82	79	62	223	99	201	522
Portland (6)	69	48	131	247	301	782	1,330
Louisville (9)	42	118	88	247	175	297	720
Omaha (18)	58	86	107	252	276	351	878
Sacramento (4)	114	98	43	255	292	651	1,198
Philadelphia (3)	63	70	133	266	134	904	1,304
Galveston (2)	70	109	96	275	487	397	1,159
Alaska (4)	97	86	95	278	412	414	1,104
Wilmington (50)	113	110	69	292	99	350	740
Memphis (3)	45	146	109	300	7	308	615
Buffalo (1)	214	50	37	301	20	560	881
New Orleans (53)	154	92	58	303	292	442	1,037
Huntington (21)	90	102	124	316	210	266	792
Vicksburg (27)	75	118	126	318	153	481	952
Chicago (4)	49	40	238	327	353	408	1,087
Charleston (15)	119	89	123	331	612	617	1,560
Baltimore (14)	102	109	146	358	207	451	1,016
Seattle (4)	47	258	55	359	171	966	1,495
Savannah (7)	91	79	192	362	300	575	1,237
Nashville (19)	146	98	127	371	186	405	962
Los Angeles (8)	122	180	71	373	378	828	1,579
Little Rock (10)	112	125	143	380	173	371	923
Norfolk (22)	101	100	195	396	260	784	1,440
St. Paul (92)	159	131	120	410	298	593	1,300
Detroit (1)	184	119	161	464	981	625	2,070
Kansas City (13)	124	112	229	465	431	966	1,862
New York (2)	99	39	351	489	145	512	1,145
Fort Worth (6)	143	214	177	534	266	476	1,276
Jacksonville (21)	204	215	131	550	452	812	1,815
Albuquerque (1)	56	29	523	608	48	643	1,299

Table 14. Average Timelines by District - Ordered Shortest to Longest by Total Processing

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
Pittsburgh (12)	82	79	62	223	99	201	522
Rock Island (16)	83	60	65	208	128	240	576
Tulsa (2)	38	47	79	164	43	397	604
Memphis (3)	45	146	109	300	7	308	615
San Francisco (1)	125	3	34	162	318	148	628
Louisville (9)	42	118	88	247	175	297	720
St. Louis (4)	27	109	59	195	400	128	722
Wilmington (50)	113	110	69	292	99	350	740
Huntington (21)	90	102	124	316	210	266	792
Mobile (21)	11	24	76	112	490	276	877
Omaha (18)	58	86	107	252	276	351	878
Buffalo (1)	214	50	37	301	20	560	881
Little Rock (10)	112	125	143	380	173	371	923
Vicksburg (27)	75	118	126	318	153	481	952
Nashville (19)	146	98	127	371	186	405	962
Baltimore (14)	102	109	146	358	207	451	1,016
New Orleans (53)	154	92	58	303	292	442	1,037
Chicago (4)	49	40	238	327	353	408	1,087
Alaska (4)	97	86	95	278	412	414	1,104
New York (2)	99	39	351	489	145	512	1,145
Galveston (2)	70	109	96	275	487	397	1,159
Sacramento (4)	114	98	43	255	292	651	1,198
Savannah (7)	91	79	192	362	300	575	1,237
Fort Worth (6)	143	214	177	534	266	476	1,276
Albuquerque (1)	56	29	523	608	48	643	1,299
St. Paul (92)	159	131	120	410	298	593	1,300
Philadelphia (3)	63	70	133	266	134	904	1,304
Portland (6)	69	48	131	247	301	782	1,330
Norfolk (22)	101	100	195	396	260	784	1,440
Seattle (4)	47	258	55	359	171	966	1,495
Charleston (15)	119	89	123	331	612	617	1,560
Los Angeles (8)	122	180	71	373	378	828	1,579
Jacksonville (21)	204	215	131	550	452	812	1,815
Kansas City (13)	124	112	229	465	431	966	1,862
Detroit (1)	184	119	161	464	981	625	2,070

Table 15. Median Timelines by District - Ordered Alphabetically

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
Alaska (4)	96	75	60	269	183	439	955
Albuquerque (1)	56	29	523	608	48	643	1,299
Baltimore (14)	92	66	91	277	162	386	860
Buffalo (1)	214	50	37	301	20	560	881
Charleston (15)	71	64	113	273	293	459	1,231
Chicago (4)	44	44	125	242	214	381	1,139
Detroit (1)	184	119	161	464	981	625	2,070
Fort Worth (6)	46	50	68	480	112	435	1,216
Galveston (2)	70	109	96	275	487	397	1,159
Huntington (21)	86	108	100	298	178	202	612
Jacksonville (21)	176	132	103	467	144	682	1,743
Kansas City (13)	78	100	136	344	248	468	1,551
Little Rock (10)	71	59	152	307	154	308	784
Los Angeles (8)	23	205	26	396	429	752	1,432
Louisville (9)	55	75	99	140	65	236	480
Memphis (3)	47	112	98	292	0	303	595
Mobile (21)	4	25	71	108	385	186	778
Nashville (19)	92	101	84	323	156	361	813
New Orleans (53)	96	61	41	253	190	305	880
New York (2)	99	39	351	489	145	512	1,145
Norfolk (22)	107	65	136	322	107	671	1,289
Omaha (18)	53	82	81	236	137	334	797
Philadelphia (3)	38	74	108	304	63	729	1,287
Pittsburgh (12)	59	59	59	207	37	154	468
Portland (6)	54	42	89	172	263	827	1,186
Rock Island (16)	92	63	61	226	58	231	490
Sacramento (4)	98	94	45	202	223	582	1,191
San Francisco (1)	125	3	34	162	318	148	628
Savannah (7)	81	66	60	241	210	390	1,165
Seattle (4)	49	263	43	345	155	924	1,391
St. Louis (4)	22	114	33	154	147	134	430
St. Paul (92)	128	114	84	378	191	402	1,081
Tulsa (2)	38	47	79	164	43	397	604
Vicksburg (27)	30	61	106	196	82	421	887
Wilmington (50)	81	100	62	266	54	307	761

Table 16. Median Timelines by District - Ordered Shortest to Longest by Federal Processing

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
Mobile (21)	4	25	71	108	385	186	778
Louisville (9)	55	75	99	140	65	236	480
St. Louis (4)	22	114	33	154	147	134	430
San Francisco (1)	125	3	34	162	318	148	628
Tulsa (2)	38	47	79	164	43	397	604
Portland (6)	54	42	89	172	263	827	1,186
Vicksburg (27)	30	61	106	196	82	421	887
Sacramento (4)	98	94	45	202	223	582	1,191
Pittsburgh (12)	59	59	59	207	37	154	468
Rock Island (16)	92	63	61	226	58	231	490
Omaha (18)	53	82	81	236	137	334	797
Savannah (7)	81	66	60	241	210	390	1,165
Chicago (4)	44	44	125	242	214	381	1,139
New Orleans (53)	96	61	41	253	190	305	880
Wilmington (50)	81	100	62	266	54	307	761
Alaska (4)	96	75	60	269	183	439	955
Charleston (15)	71	64	113	273	293	459	1,231
Galveston (2)	70	109	96	275	487	397	1,159
Baltimore (14)	92	66	91	277	162	386	860
Memphis (3)	47	112	98	292	0	303	595
Huntington (21)	86	108	100	298	178	202	612
Buffalo (1)	214	50	37	301	20	560	881
Philadelphia (3)	38	74	108	304	63	729	1,287
Little Rock (10)	71	59	152	307	154	308	784
Norfolk (22)	107	65	136	322	107	671	1,289
Nashville (19)	92	101	84	323	156	361	813
Kansas City (13)	78	100	136	344	248	468	1,551
Seattle (4)	49	263	43	345	155	924	1,391
St. Paul (92)	128	114	84	378	191	402	1,081
Los Angeles (8)	23	205	26	396	429	752	1,432
Detroit (1)	184	119	161	464	981	625	2,070
Jacksonville (21)	176	132	103	467	144	682	1,743
Fort Worth (6)	46	50	68	480	112	435	1,216
New York (2)	99	39	351	489	145	512	1,145
Albuquerque (1)	56	29	523	608	48	643	1,299

Table 17. Median Timelines by District - Ordered Shortest to Longest by Total Processing

Note: Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
St. Louis (4)	22	114	33	154	147	134	430
Pittsburgh (12)	59	59	59	207	37	154	468
Louisville (9)	55	75	99	140	65	236	480
Rock Island (16)	92	63	61	226	58	231	490
Memphis (3)	47	112	98	292	0	303	595
Tulsa (2)	38	47	79	164	43	397	604
Huntington (21)	86	108	100	298	178	202	612
San Francisco (1)	125	3	34	162	318	148	628
Wilmington (50)	81	100	62	266	54	307	761
Mobile (21)	4	25	71	108	385	186	778
Little Rock (10)	71	59	152	307	154	308	784
Omaha (18)	53	82	81	236	137	334	797
Nashville (19)	92	101	84	323	156	361	813
Baltimore (14)	92	66	91	277	162	386	860
New Orleans (53)	96	61	41	253	190	305	880
Buffalo (1)	214	50	37	301	20	560	881
Vicksburg (27)	30	61	106	196	82	421	887
Alaska (4)	96	75	60	269	183	439	955
St. Paul (92)	128	114	84	378	191	402	1,081
Chicago (4)	44	44	125	242	214	381	1,139
New York (2)	99	39	351	489	145	512	1,145
Galveston (2)	70	109	96	275	487	397	1,159
Savannah (7)	81	66	60	241	210	390	1,165
Portland (6)	54	42	89	172	263	827	1,186
Sacramento (4)	98	94	45	202	223	582	1,191
Fort Worth (6)	46	50	68	480	112	435	1,216
Charleston (15)	71	64	113	273	293	459	1,231
Philadelphia (3)	38	74	108	304	63	729	1,287
Norfolk (22)	107	65	136	322	107	671	1,289
Albuquerque (1)	56	29	523	608	48	643	1,299
Seattle (4)	49	263	43	345	155	924	1,391
Los Angeles (8)	23	205	26	396	429	752	1,432
Kansas City (13)	78	100	136	344	248	468	1,551
Jacksonville (21)	176	132	103	467	144	682	1,743
Detroit (1)	184	119	161	464	981	625	2,070

Table 18. Bank Timelines – Ordered by Average Federal Processing

Note: Green indicates MBIs in the first quartile, dark pink indicates MBIs in the 4th quartile. Also, Prospectus, Draft Instrument, and Final Instrument add up to Total Mandatory Federal Processing time.

District (# banks)	Bank Name	Prospectus	Draft Instrument	Final Instrument	Total Mandatory Federal	Total Additional	Total Sponsor	TOTAL
New Orleans (53)	Moss Lake Mitigation Bank	1	50	3	54	164	144	362
Mobile (21)	Mulberry Fork Mitigation Bank	0	11	44	55	733	199	987
Mobile (21)	ADCNR Beehive Pasture ILF Stre	0	1	55	56	162	186	404
St. Paul (92)	Montgomery/ Hollywood Twnshp We	0	57	0	57	2418	16	2491
Rock Island (16)	Mike Thompson - Wetlands Forev	3	19	39	61	26	61	148
New Orleans (53)	Black Bayou Mitigation Bank Ad	1	48	14	63	64	238	365
Rock Island (16)	Guy Groenewold	1	29	34	64	60	204	328
Wilmington (50)	EBX/NEU-CON/Bufalo Branch Str	2	29	39	70	0	140	210
Omaha (18)	DU HIPPI MITIGATION BANK SITE,	3	60	7	70	23	118	211
Wilmington (50)	STONE FARM MITIGATION BANK/WIL	28	21	22	71	0	7	78
Chicago (4)	V3 Restoration - Gray Willows	35	9	29	73	315	94	482
Baltimore (14)	MD SHA/BLOEDE DAM REMOVAL/MITI	11	60	4	75	141	85	301
Mobile (21)	Big Sandy Mitigation Bank Phas	1	22	52	75	287	67	429
Mobile (21)	Dry Creek Mitigation Bank	1	25	49	75	659	44	778
Mobile (21)	Locust Fork Mitigation Bank	5	8	62	75	705	120	900
St. Paul (92)	Browns Preserve Mitigation Ban	55	10	12	77	680	816	1573
Mobile (21)	Downey Branch Mitigation Bank	1	7	70	78	381	15	474
Mobile (21)	Mud Creek Mitigation Bank	1	20	58	79	81	56	216
Mobile (21)	Buck Creek Mitigation Bank	5	19	56	80	25	33	138
Huntington (21)	Spanishburg Mitigation Bank Ri	52	7	26	85	508	750	1343
Wilmington (50)	Northeast Cape Fear Umbrella M	54	28	4	86	60	139	285
Pittsburgh (12)	EIP 3 Credit Company Brushy Fo	6	33	48	87	248	201	536
Portland (6)	Marys River Mitigation Bank	71	14	2	87	167	659	913
New Orleans (53)	Upper Atchafalaya Mitigation B	63	18	6	87	54	835	976
Los Angeles (8)	Upper Los Cerritos Wetland Mit	1	38	49	88	0	1046	1134

New Orleans (53)	Delta Land Services - Bayou Fi	25	58	7	90	0	231	321
Louisville (9)	Flynn Fork Mitigation Bank - C	3	42	46	91	131	126	348
Charleston (15)	Big Generossee Creek Mitigatio	0	4	88	92	52	550	694
Mobile (21)	Coosa River Mitigation Bank	32	7	54	93	385	159	637
New Orleans (53)	Ash Slough M B Addendum 1	85	1	8	94	334	18	446
Vicksburg (27)	Wildlife Mississippi/012712/Pe	0	71	24	95	83	725	903
Rock Island (16)	Nahant Marsh Wetland and Strea	37	47	13	97	102	274	473
Vicksburg (27)	Resource Environmental Solutio	57	36	5	98	4	822	924
Charleston (15)	Caton Creek Mitigation Site	18	49	31	98	293	763	1154
Mobile (21)	Pascagoula River Mitigation Ba	4	25	74	103	101	303	507
New Orleans (53)	Waldheim Mitigation Bank	44	41	19	104	263	94	461
Vicksburg (27)	NASA-John C. Stennis Space Cen	33	31	41	105	48	343	496
Pittsburgh (12)	Randolph I Mit. Bank - Duplica	3	35	68	106	41	335	482
Mobile (21)	Broadview Mitigation Bank- Pha	14	36	58	108	341	63	512
Mobile (21)	Bogue Homo Mitigation Bank Pha	4	33	71	108	185	542	835
Fort Worth (6)	Bill Moore Mitigation Bank	34	36	39	109	686	1064	1859
Vicksburg (27)	Triple S Farms, Incorporated/0	31	62	17	110	945	99	1154
Mobile (21)	Westervelt proposed Mitigation	1	25	87	113	506	214	833
Charleston (15)	Poplar Grove Wetland Mitigatio	62	53	0	115	1799	1037	2951
Seattle (4)	Coweeman River Wetland and Con	7	58	51	116	145	771	1032
Norfolk (22)	Thompson Place Mitigation Bank	16	33	70	119	1011	359	1489
Pittsburgh (12)	Kincheloe Mitigation Bank (Bun	29	61	31	121	121	42	284
Mobile (21)	Bogue Homa Mitigation Bank	2	31	90	123	302	1536	1961
Mobile (21)	Arlington Plantation Mitigatio	2	31	91	124	991	273	1388
Pittsburgh (12)	EBX-EM, Seven Pines Mitigation	8	81	38	127	54	197	378
Rock Island (16)	Des Moines River Mitigation Ba	93	0	34	127	55	274	456
Vicksburg (27)	Upper Coldwater Mitigation Ban	20	91	16	127	1	510	638
Vicksburg (27)	Rio Rojo LLC/041412/Request fo	43	20	65	128	9	692	829
Wilmington (50)	Mogensen Mitigation/Huff Prope	35	71	22	128	166	1218	1512
St. Louis (4)	Eberhardt Trust Mitigation Ban	1	94	34	129	154	113	396

Louisville (9)	EIP-KSWMB-Big Sandy Mitigation	55	75	0	130	53	331	514
Louisville (9)	EIP-KSWMB-Little Sandy Mitigat	55	75	1	131	53	236	420
Louisville (9)	Kentucky Stream and Wetland Mi	55	75	1	131	113	236	480
Chicago (4)	Land and Lakes Development Com	46	61	24	131	113	484	728
New Orleans (53)	Crooked Branch Mitigation Bank	41	35	57	133	190	162	485
Little Rock (10)	Gum Log Creek mitigation bank	54	58	21	133	51	371	555
New Orleans (53)	Big Bend Mitigation Bank	81	45	8	134	100	1133	1367
Vicksburg (27)	Berg Mitigation Bank, LLC/0703	3	61	71	135	241	261	637
Kansas City (13)	Swallow Tail, LLC - Neosho Riv	14	31	92	137	1074	340	1551
Sacramento (4)	Machine Lake Mitigation Bank	4	64	70	138	31	100	269
St. Louis (4)	Umbrella Mitigation Bank	64	42	32	138	99	84	321
Baltimore (14)	JBA-DoD Umbrella Mitigation Ba	32	71	35	138	182	207	527
Norfolk (22)	Chesapeake Bay Mitigation Bank	0	83	55	138	145	537	820
Baltimore (14)	PA DOT - Statewide Mitigation	26	85	27	138	371	396	905
St. Paul (92)	Strolberg Wetland Bank	42	14	83	139	37	2025	2201
Vicksburg (27)	MDOT/042611/Request for Review	7	97	36	140	15	57	212
Wilmington (50)	EBX/Neu-Con/Resource Environme	23	71	46	140	144	292	576
Louisville (9)	Flat Creek Mitigation Bank	0	41	99	140	65	377	582
New Orleans (53)	Petit Bois Mitigation Bank - A	24	84	35	143	125	257	525
Portland (6)	Oregon Wetlands LLC (South San	56	73	15	144	199	577	920
Norfolk (22)	Pleasure House Point Mitigatio	6	48	90	144	0	2347	2491
Vicksburg (27)	Yockanookany Mitigation Resour	98	42	5	145	0	464	609
Omaha (18)	Ducks Unlimited Umbrella Mitig	50	28	67	145	234	464	843
Savannah (7)	Mulberry Grove Mitigation Bank	58	34	54	146	381	390	917
Charleston (15)	Great Pee Dee Mitigation Bank	43	78	26	147	625	459	1231
Mobile (21)	Cumbest Wetland Mitigation Ban	7	36	105	148	1255	449	1852
New Orleans (53)	English Bayou Mitigation Bank	70	38	44	152	133	241	526
Portland (6)	ODOT - Greenhill (a.k.a Willam	0	93	59	152	215	1061	1428
Philadelphia (3)	Rio Grande Swamp Mitigation Ba	30	74	49	153	40	1337	1530
Wilmington (50)	Yadkin 01 Umbrella Mitigation	52	49	53	154	4	381	539

Mobile (21)	Selma Dixon Mitigation Bank	35	35	84	154	408	159	721
St. Paul (92)	Lauren Schroeder Wetland Bank	1	26	127	154	1501	1688	3343
Alaska (4)	Trillium Mitigation Bank - Pri	90	64	1	155	1161	712	2028
Omaha (18)	NDDOT; Koenig Wetland Mitigati	27	90	39	156	20	277	453
Rock Island (16)	John Ryan - Land and Water Res	90	49	17	156	0	311	467
Omaha (18)	SDDOT - UMBI - Vermillion Rive	64	63	29	156	152	359	667
Mobile (21)	Wolf Run Mitigation Bank	7	29	120	156	1321	458	1935
New Orleans (53)	Bunches Creek Mitigation Bank	80	57	20	157	103	550	810
Wilmington (50)	Falling Creek Umbrella Mitigat	61	48	50	159	44	134	337
Vicksburg (27)	Scott Gideon/050715/ NWP 27 Re	20	24	116	160	9	911	1080
Mobile (21)	Wolf River Mitigation Bank	3	42	116	161	877	390	1428
San Francisco (1)	North Bay Mitigation Bank (for	125	3	34	162	318	148	628
Tulsa (2)	Honey Springs Mitigation Bank,	0	63	101	164	37	327	528
Wilmington (50)	Cedar Grove Golf Course Stream	74	78	12	164	0	393	557
Tulsa (2)	HEI Project No HEI-15-12, Deep	76	31	57	164	49	467	680
Savannah (7)	Old Creek Place Mitigation Ban	71	37	57	165	322	633	1120
Rock Island (16)	White Fox Mitigation Bank	82	48	36	166	100	196	462
New Orleans (53)	Black Bayou Mitigation Bank	70	72	24	166	135	247	548
Mobile (21)	Alabama River Mitigation Bank	35	35	96	166	587	162	915
Los Angeles (8)	Port of Los Angeles Umbrella M	9	18	139	166	737	1800	2703
New Orleans (53)	Kimball Ranch Mitigation Bank	76	35	56	167	937	1429	2533
Vicksburg (27)	Wesson Timber, LLC/050318/Requ	0	34	135	169	0	77	246
St. Louis (4)	Little Muddy Wetland and Strea	17	134	19	170	140	154	464
Omaha (18)	North Central Mitigation LLC H	55	89	27	171	0	192	363
New Orleans (53)	Delta Land Services - Sucre Br	79	47	46	172	40	452	664
Vicksburg (27)	Delta Land Services/072215/ Pr	1	62	109	172	655	202	1029
Jacksonville (21)	MitBank - Alafia River	67	52	56	175	904	664	1743
Vicksburg (27)	Banks Family Limited Partnersh	30	41	106	177	120	138	435
Wilmington (50)	Camp Grier Mitigation Bank	173	2	2	177	374	2	553
Little Rock (10)	Little Fourche Creek Mitigatio	84	67	26	177	468	703	1348

Little Rock (10)	Osage Creek Mitigation Bank	3	2	173	178	205	215	598
Charleston (15)	Spring Branch (Beidler Forest)	7	57	116	180	198	200	578
Seattle (4)	Terrace Mitigation Bank	27	134	19	180	267	518	965
Jacksonville (21)	MitBank - Fox Branch Ranch	83	39	60	182	159	1409	1750
New Orleans (53)	JD Landry, A 436.9-acre tract	55	48	80	183	702	84	969
Pittsburgh (12)	First Pennsylvania Resource (R)	123	39	22	184	32	154	370
Wilmington (50)	RES Yadkin 01 Stream and Wetla	69	29	87	185	332	348	865
New Orleans (53)	Hickory Branch Umbrella Mitiga	76	61	48	185	280	415	880
St. Paul (92)	Agassiz Wild Rice, LLC / Agass	24	125	36	185	204	889	1278
Sacramento (4)	Antonio Mountain Ranch Conserv	115	27	43	185	691	915	1791
Wilmington (50)	RES Yadkin 01 Stream and Wetla	70	29	87	186	55	624	865
St. Paul (92)	Bank of Maple Plain - Crow Riv	71	45	72	188	787	14	989
New Orleans (53)	Laurel Valley Coastal MB Amend	93	67	29	189	116	355	660
Portland (6)	Claremont Road Mitigation Bank	50	23	118	191	516	236	943
Wilmington (50)	Falling Creek Mitigation Site	43	72	77	192	100	373	665
St. Paul (92)	USFS Superior National Forest	83	88	21	192	372	111	675
Wilmington (50)	Neucon Umbrella Mitigation Ban	42	100	51	193	359	590	1142
Kansas City (13)	Gasconade River Wetland and St	45	113	35	193	2175	713	3081
Pittsburgh (12)	First Pennsylvania Resource (R)	140	35	20	195	0	153	348
Vicksburg (27)	Weyerhaeuser NR Company/112812	0	84	112	196	40	463	699
Wilmington (50)	Cane Creek Umbrella Mitigation	41	104	52	197	307	401	905
Rock Island (16)	JEO	51	97	53	201	34	249	484
Memphis (3)	Rossville Farm Mitigation Bank	47	74	82	203	21	262	486
Nashville (19)	Lodi Stream Mitigation Bank	75	94	36	205	331	327	863
New Orleans (53)	Pontchartrain Basin Umbrella M	118	81	7	206	245	162	613
Norfolk (22)	Tye River Mitigation Bank	20	62	125	207	190	800	1197
Nashville (19)	Swamp Road Wetland Mitigation	86	39	84	209	179	109	497
Wilmington (50)	Cane Creek Umbrella Mitigation	41	140	28	209	20	473	702
New Orleans (53)	Church Branch Mitigation Bank,	105	39	66	210	14	242	466
Alaska (4)	Portage Reserve Mitigation Ban	99	86	25	210	202	65	477

Norfolk (22)	Lower James Stream Mitigation	76	54	80	210	95	884	1189
Baltimore (14)	PA DOT - Statewide Mitigation	31	35	144	210	612	376	1198
St. Paul (92)	John Welle Laurentian North We	77	82	52	211	0	223	434
Huntington (21)	Stream + Wetlands Foundation I	88	53	70	211	0	833	1044
Vicksburg (27)	Loneoak Capital Management, LL	14	37	161	212	90	235	537
Mobile (21)	MDOT, Buttahatchie Mitigation	66	32	114	212	0	360	572
Omaha (18)	NE Dept. of Roads Mitigation 7	63	86	64	213	307	733	1253
Charleston (15)	Toms Branch Mitigation Bank	120	59	34	213	41	1024	1278
Savannah (7)	Conasauga Bend Mitigation Bank	81	73	60	214	195	386	795
Wilmington (50)	Cape Fear 02 Umbrella Stream M	104	90	21	215	180	587	982
Huntington (21)	Cline Run Mitigation Bank - Cl	101	73	42	216	83	141	440
St. Paul (92)	Sugar River Wetland Bank	93	97	26	216	94	378	688
St. Paul (92)	Nygren Wetland Bank	82	70	64	216	303	182	701
Wilmington (50)	RES/Neu-Con/Arrington Bridge I	0	59	157	216	0	529	745
Nashville (19)	Setters Ridge Stream Mitigatio	92	82	43	217	172	390	779
Sacramento (4)	Grasslands Mitigation Bank	81	123	14	218	123	249	590
Little Rock (10)	Muddy Bayou Mitigation Bank	20	77	121	218	247	250	715
New Orleans (53)	Hickory Lake Creek Mitigation	53	110	55	218	622	837	1677
Pittsburgh (12)	Shrader Hollow Road Mitigation	76	41	102	219	31	135	385
New Orleans (53)	Bayou Maringouin Umbrella Bank	62	31	126	219	72	110	401
Pittsburgh (12)	Furnace Run Mitigation Bank	66	88	65	219	7	227	453
Rock Island (16)	Heineman Mitigation Bank	71	67	82	220	0	304	524
Vicksburg (27)	Loneoak Capital Management, LL	3	49	168	220	216	451	887
St. Paul (92)	Refuge at Rush Creek Mitigation	99	109	14	222	630	242	1094
Wilmington (50)	Cane Creek Umbrella Mitigation	41	81	101	223	307	178	708
Kansas City (13)	ESS Green 1, LLC - Blackwater/	58	75	91	224	56	468	748
New Orleans (53)	Delta Land Services - Laurel V	89	86	50	225	44	285	554
Fort Worth (6)	Rockin' K On Chambers Creek Mi	57	105	63	225	17	630	872
New Orleans (53)	Cow Branch Coastal Mitigation	84	74	68	226	87	234	547
New Orleans (53)	Cedar Grove Mitigation Bank	112	78	37	227	224	52	503

Nashville (19)	CEC - South Mouse Creek Mitiga	81	84	63	228	93	373	694
Omaha (18)	South Dakota Department of Tra	77	60	91	228	1232	186	1646
Rock Island (16)	McCorkle Mitigation Bank	97	64	70	231	35	206	472
Nashville (19)	Neely's Bend Stream Mitigation	92	106	33	231	221	361	813
St. Paul (92)	Legacy Bogs, LLC - Northland M	94	68	70	232	222	373	827
Omaha (18)	Ducks Unlimited develop Umbrel	91	77	64	232	618	300	1150
Nashville (19)	Paint Rock Creek Stream & Wetl	108	101	24	233	225	638	1096
Omaha (18)	Yellowstone Mitigation, LLC (E	15	55	166	236	242	318	796
Omaha (18)	Yellowstone Mitigation, LLC (E	15	55	166	236	242	318	796
Omaha (18)	Yellowstone Mitigation, LLC (E	15	55	166	236	242	318	796
Louisville (9)	KYTC-Umbrella Mitigation Bank	53	27	156	236	825	45	1106
Wilmington (50)	Neucon Umbrella Mitigation Ban	87	97	53	237	0	126	363
Huntington (21)	Sandy Creek Mitigation Bank	64	97	76	237	3	216	456
Rock Island (16)	Nieburh Stream Mitigation Bank	97	73	68	238	371	284	893
Kansas City (13)	Swallow Tail, LLC - Kansas Riv	109	77	55	241	0	267	508
Baltimore (14)	Upper Susquehanna River Mitiga	102	55	84	241	125	362	728
Savannah (7)	Etowah River Road Mitigation B	123	60	58	241	124	800	1165
Wilmington (50)	WLS Catawba 01 UMB- Starker Si	116	89	37	242	65	87	394
Wilmington (50)	Blackbird Mitigation Site / EB	82	95	65	242	355	390	987
Wilmington (50)	Neu-con UMBI - Stone Creek Mit	99	135	9	243	11	517	771
St. Paul (92)	Peshtigo Brook Wetland Mitigat	4	171	68	243	0	1362	1605
St. Paul (92)	Mike Reed Reed's Rendezvous Ko	22	197	24	243	202	2566	3011
New Orleans (53)	St. Gabriel Mitigation Bank	121	116	7	244	257	380	881
St. Paul (92)	Schramel Sod Wetland Bank Site	123	81	41	245	171	263	679
St. Paul (92)	Spartan Land Investments, LLC	103	91	51	245	140	440	825
St. Paul (92)	Burns, Steve / Burns Wetland B	131	90	24	245	332	441	1018
Nashville (19)	Walnut Shade Stream Mitigation	88	92	65	245	47	996	1288
Huntington (21)	Bearwallo Run Mitigation Bank	86	101	59	246	1035	270	1551
New Orleans (53)	The 159.6ac Beaver Creek Miti	169	64	14	247	408	262	917
Baltimore (14)	Mitigation Bank - Vargo Site	85	25	138	248	84	424	756

Charleston (15)	Two Rivers Wetland and Stream	71	64	113	248	338	1014	1600
Little Rock (10)	Illinois River mitigation bank	57	36	156	249	165	230	644
Pittsburgh (12)	Enlow Fork Mitigation Bank, Fi	0	196	53	249	396	742	1387
St. Paul (92)	MN - Anoka - BWSR Woodland Cre	102	105	43	250	213	587	1050
St. Paul (92)	Johnson Wetland Bank	171	15	66	252	0	378	630
Norfolk (22)	Dry Fork Mitigation Bank	100	62	90	252	36	529	817
Norfolk (22)	Bailey Mitigation Bank, Charle	14	91	147	252	184	729	1165
St. Paul (92)	Olson Wetland Bank Plan	119	49	85	253	33	41	327
St. Paul (92)	Curt Madsen Wetland Bank	88	62	103	253	9	131	393
Rock Island (16)	Jeff McCorkle	70	62	121	253	193	142	588
New Orleans (53)	Marine Bayou Mitigation Bank -	145	57	51	253	1003	308	1564
New Orleans (53)	Bull Island Mitigation Bank	162	50	41	253	590	890	1733
Huntington (21)	Big Run, LLC - Cranberry Bog M	79	125	50	254	7	97	358
Louisville (9)	EIP III Credit Company - Kentu	0	97	158	255	58	61	374
Wilmington (50)	RES Cape Fear 02 UMBI: Cloud a	155	75	25	255	0	164	419
Nashville (19)	Baileyton Stream Mitigation Ba	74	115	66	255	43	452	750
New Orleans (53)	L.J.G. Land Company Mitigation	210	38	7	255	162	1123	1540
Wilmington (50)	Wildlands Cape Fear 05 Umbrell	94	99	63	256	14	364	634
Wilmington (50)	McLenny Acres II Mitigation Si	89	130	39	258	30	56	344
St. Paul (92)	Ogema Wetland Bank	105	62	91	258	0	206	464
Huntington (21)	Foster Run Mitigation Bank, Fo	85	90	85	260	0	140	400
Galveston (2)	Tarkington Bayou Mitigation Ba	60	151	49	260	915	82	1257
New Orleans (53)	Rosedale Mitigation Bank;	126	31	103	260	365	898	1523
Baltimore (14)	Upper Susquehanna River Mitiga	0	205	56	261	27	83	371
Savannah (7)	Washington Branch Wetland Miti	98	66	97	261	733	194	1188
St. Paul (92)	Dennis Laboda Flute Reed River	62	66	134	262	253	389	904
Omaha (18)	North Central Mitigation, LLC,	104	42	117	263	93	349	705
New Orleans (53)	Delta Land Services, LLC - Upp	95	78	91	264	43	270	577
St. Paul (92)	South Fork Wetland Bank Kanabe	259	3	2	264	7	2041	2312
Rock Island (16)	Johnson County Conservation Bo	144	77	44	265	735	196	1196

Norfolk (22)	New Mill Creek Tidal Wetland M	58	42	166	266	26	112	404
Fort Worth (6)	Phillips Creek Mitigation Bank	16	39	211	266	202	261	729
New Orleans (53)	JD Thibodaux, An 850ac tract I	73	158	39	270	722	387	1379
Charleston (15)	Mill Creek Mitigation Bank	185	22	66	273	78	435	786
Wilmington (50)	Neucon Umbrella Mitigation Ban	119	125	30	274	371	119	764
Norfolk (22)	Hungry Run Mitigation Bank	4	39	233	276	2488	55	2819
Wilmington (50)	RES Cape Fear Umbrella Mitigat	155	42	80	277	214	139	630
New Orleans (53)	Jamestown Mitigation Bank	261	16	0	277	680	331	1288
Nashville (19)	Banks Pisgah Mitigation Bank,	88	120	70	278	79	300	657
St. Paul (92)	Exsted Mitigation Site sponsor	76	141	62	279	275	1391	1945
Huntington (21)	Larkin Hollow Mitigation Bank	70	128	82	280	191	44	515
Kansas City (13)	Swallow Tail, LLC - Upper Osag	129	103	48	280	4	294	578
Vicksburg (27)	Upper Coldwater Mitigation Ban	0	119	162	281	123	377	781
Wilmington (50)	RES Cape Fear 03 UMBI & Feed a	79	149	53	281	185	462	928
Vicksburg (27)	Deer Creek Road Mitigation/082	229	48	4	281	385	1127	1793
Louisville (9)	EIP-KSWMB-Rolling Fork Stream	100	43	139	282	0	68	350
Wilmington (50)	Daniels Creek Mitigation Site/	76	145	62	283	1	522	806
Norfolk (22)	New River Highland Mitigation	42	42	201	285	119	1267	1671
St. Paul (92)	Poppler-Harms Wetland Bank	57	84	147	288	323	660	1271
Huntington (21)	Oxbow Mitigation Bank - Louthe	91	113	85	289	169	82	540
Huntington (21)	Beverly Mitigation Bank Beaver	111	38	140	289	283	270	842
Galveston (2)	Houston-Conroe Mitigation Bank	80	67	142	289	59	712	1060
St. Paul (92)	Scott SWCD Helena Road Bank De	160	109	21	290	28	163	481
St. Paul (92)	Kingman Wetland Bank	158	122	11	291	221	286	798
Los Angeles (8)	San Luis Rey Mitigation Bank	24	246	21	291	36	793	1120
Memphis (3)	Smokestack Mitigation Bank	82	112	98	292	0	303	595
Baltimore (14)	Patuxent Mitigation Bank	99	61	132	292	70	513	875
Jacksonville (21)	MitBank - Crooked River (FKA-C	51	65	176	292	25	591	908
Charleston (15)	Carter Stilley Wetland and Str	50	151	91	292	489	387	1168
Rock Island (16)	Pony Creek Wetland Mitigation	106	105	83	294	0	202	496

St. Paul (92)	Spartan Land Investments, LLC/	99	144	51	294	104	421	819
Rock Island (16)	Black Hawk Mitigation Bank	106	100	90	296	159	399	854
Huntington (21)	Crow Run Mitigation Bank - Cro	55	119	124	298	183	98	579
St. Paul (92)	Steve Goodwin Wetland Bank	0	20	279	299	109	96	504
St. Paul (92)	Church Farm Wetland Bank - And	167	101	31	299	709	30	1038
Wilmington (50)	Red Barn Mitigation Bank	61	176	63	300	88	369	757
Kansas City (13)	Swallow Tail, LLC - Blue Branc	65	100	136	301	0	227	528
Buffalo (1)	The Wetland Trust - Inland Sal	214	50	37	301	20	560	881
Wilmington (50)	KCI Cape Fear 02 UMBI & Black	128	115	59	302	72	206	580
New Orleans (53)	Kilgore Corporation Mitigation	138	58	106	302	447	305	1054
Omaha (18)	Robert L Bundy Family Partners	46	106	151	303	1398	398	2099
New Orleans (53)	Blouin Mitigation Bank, Racela	179	54	71	304	2	217	523
Omaha (18)	South Dakota Department of Tra	77	157	70	304	0	597	901
Philadelphia (3)	Evergreen Great Bay Mitigation	122	74	108	304	63	729	1096
Baltimore (14)	MITIGATION BANK (Commercial) -	149	75	81	305	83	460	848
St. Paul (92)	Dakota Co.-Jordan LRWRP bank s	96	99	112	307	0	132	439
St. Paul (92)	Clear Lake Bank	147	103	58	308	93	7	408
Huntington (21)	Ecosystem Investment Partners	80	156	72	308	31	226	565
Rock Island (16)	Afton South Prairie Wetland Mi	136	63	109	308	172	332	812
Wilmington (50)	Neucon Umbrella Mitigation Ban	61	213	38	312	15	320	647
Wilmington (50)	Neu-con Umbrella Mitigation Ba	119	104	89	312	30	532	874
Jacksonville (21)	MitBank - Hilochee	80	132	100	312	60	714	1086
Wilmington (50)	WLS Neuse 02-Scarborough Site	158	95	61	314	52	136	502
Norfolk (22)	Low Ground Mitigation Bank	87	50	177	314	0	304	618
New Orleans (53)	Spring Bayou Mitigation Bank	133	141	41	315	246	993	1554
St. Paul (92)	Forsman Wetland Bank - Forsman	121	94	101	316	84	681	1081
St. Paul (92)	Stelter Mitigation Bank	144	124	49	317	61	414	792
St. Paul (92)	Peshigo Brook WDOT Bank Site	180	75	66	321	5	100	426
Huntington (21)	Kanawha-Sapsucker Run Mitigati	102	113	107	322	178	65	565
Huntington (21)	Buffalo Creek Preserve, LLC -	70	128	124	322	439	823	1584

Nashville (19)	Mud Creek Stream Mitigation Ba	71	165	87	323	47	290	660
Jacksonville (21)	MitBank - Kissimmee Ridge (for	77	197	50	324	0	543	867
St. Paul (92)	Lake Superior Wetland Bank	155	113	56	324	262	432	1018
St. Paul (92)	Lake Superior Wetland Mitigati	136	129	59	324	12	2067	2403
Wilmington (50)	WLS Neuse 01 Umbrella Bank - H	142	115	68	325	93	262	680
Alaska (4)	Tanana River Watershed Umbrell	93	139	95	327	163	389	879
Huntington (21)	Kanawha-Yeager Fork Mitigation	126	70	132	328	214	70	612
St. Paul (92)	Butterfly Marsh Wetland Bank (	127	114	88	329	201	451	981
Norfolk (22)	Amelia Environmental Bank-Amel	124	185	20	329	121	930	1380
St. Paul (92)	MPJWR/Preiner ENRV Wetland Mit	116	191	25	332	174	432	938
New York (2)	NY City Economic Dev Corp Saw	104	42	186	332	289	388	1009
Jacksonville (21)	MitBank - Wiggins Prairie	197	112	25	334	135	907	1376
Pittsburgh (12)	Harmony Environmental, LLC. -	217	56	66	339	237	26	602
Pittsburgh (12)	EIP III Credit Company, LLC, P	52	157	131	340	17	130	487
St. Paul (92)	Todd Torkelson/Council Creek	143	122	76	341	216	387	944
Philadelphia (3)	Evergreen Abbot Creek Mitigati	38	63	241	342	300	645	1287
St. Louis (4)	Meramec Bluffs Wetland Mitigat	26	165	151	342	1206	159	1707
Kansas City (13)	Swallow Tail, LLC - Kansas Riv	27	98	219	344	464	61	869
Vicksburg (27)	Resource Environmental Solutio	28	39	278	345	659	201	1205
Nashville (19)	West Fork Drakes Creek Stream	165	121	60	346	0	270	616
Jacksonville (21)	Mitbank - St. Johns/St. Johns	111	124	112	347	1479	585	2411
St. Paul (92)	Stolp Wetland Bank	103	174	71	348	16	198	562
New Orleans (53)	Delta Land Services - 338 acre	168	148	32	348	117	158	623
Kansas City (13)	Whitewater River Wetland and S	50	34	264	348	0	2410	2758
Wilmington (50)	RES Yadkin 01 Stream and Wetla	68	196	87	351	23	435	809
St. Paul (92)	Schmidgall Wetland Mitigation	169	109	73	351	316	645	1312
Huntington (21)	Indian Creek Mitigation Bank,	59	193	100	352	14	138	504
Omaha (18)	Mitigation Bank - Big Thompson	151	155	46	352	0	446	798
Wilmington (50)	RES Yadkin 01 Stream and Wetla	69	196	87	352	118	395	865
Chicago (4)	Muirhead Springs Wetland Mitig	74	59	220	353	960	277	1590

Nashville (19)	Little Trammel Creek Stream Mi	109	115	130	354	169	598	1121
St. Paul (92)	Pickrel Site #10 Wetland Bank	205	81	69	355	0	817	1172
Rock Island (16)	C&W Hunter Mitigation Bank	149	54	154	357	1	212	570
Jacksonville (21)	MitBank - Florida Gulf Coast (	181	77	99	357	134	441	932
Wilmington (50)	KCI Yadkin 01 UMB: Hair Sheep	106	224	30	360	129	292	781
Norfolk (22)	Limestone Mitigation Bank	216	84	61	361	0	2249	2610
Little Rock (10)	West Fork White River Stream M	157	60	147	364	129	384	877
Norfolk (22)	Mill Run Mitigation Bank	211	74	80	365	347	122	834
New Orleans (53)	JD Jarreau, A 214.7ac tract ad	272	87	7	366	251	108	725
St. Paul (92)	Bluff Creek Mitigation Bank	167	156	46	369	56	1898	2323
Wilmington (50)	130 of Chatham / Box Creek Wil	56	49	268	373	20	1022	1415
St. Paul (92)	Stevensen, Alan / Stevensen We	121	91	163	375	141	145	661
New Orleans (53)	Marsh Bayou Mitigation Bank	96	76	203	375	46	356	777
Wilmington (50)	Upper Rocky Umbrella Mitigatio	166	92	119	377	0	849	1226
New Orleans (53)	Delta Land Services Ponderosa	239	40	99	378	53	353	784
Vicksburg (27)	Delta Land Services, LLC/06201	12	96	270	378	115	528	1021
Huntington (21)	Big Horse Creek Mitigation Ban	84	108	187	379	53	339	771
Nashville (19)	Center Point Mitigation Bank (	86	154	139	379	156	306	841
St. Paul (92)	Kevin Root Wetland Bank	104	121	155	380	380	363	1123
Wilmington (50)	Yadkin Valley Umbrella Mitigat	116	168	98	382	151	237	770
St. Paul (92)	Engstrom Road Wetland Bank [ne	178	172	32	382	217	235	834
St. Paul (92)	World Dairy Center Proposed Mi	105	212	67	384	551	518	1453
Wilmington (50)	WLS Yadkin 01 - Grassy Creek T	71	182	133	386	69	293	748
St. Paul (92)	ArcelorMittal Proposed Compens	114	97	175	386	79	514	979
Kansas City (13)	Swallow Tail, LLC - Sac River	89	202	95	386	898	1337	2621
Los Angeles (8)	Petersen Ranch Mitigation Bank	196	169	22	387	342	607	1336
St. Paul (92)	Maple Grove, City of / Ranchvi	106	136	146	388	399	913	1700
Portland (6)	Linnton Water Credits, LLC	182	29	181	392	311	1166	1869
Omaha (18)	NDDOT Herda Wetland Mitigation	36	137	220	393	18	419	830
Omaha (18)	NDDOT Trego Wetland Mitigation	36	137	220	393	18	419	830

Wilmington (50)	WLS Yadkin 01- Toms Creek Miti	71	172	151	394	21	285	700
Jacksonville (21)	MitBank - Old Florida	146	148	103	397	19	218	634
Vicksburg (27)	Berg Mitigation Banks LLC/0510	83	182	132	397	0	421	818
St. Paul (92)	Fuller Wetland Bank applicatio	240	79	81	400	132	39	571
St. Paul (92)	Benz Wetland Bank	89	249	62	400	233	251	884
New Orleans (53)	JD Conn, The Ratliff Woodlands	94	61	245	400	1036	124	1560
Wilmington (50)	Yadkin Valley Umbrella Mitigat	116	167	118	401	151	218	770
Los Angeles (8)	Riverpark Mitigation Bank	13	365	26	404	184	773	1361
Charleston (15)	Murray Hill Mitigation Bank	229	61	115	405	885	560	1850
Memphis (3)	West TN Wetlands Mit. Bank / E	6	252	148	406	0	358	764
St. Paul (92)	North Shore Federal Credit Uni	164	151	91	406	326	457	1189
St. Paul (92)	Ball Wetland Mitigation Bank	255	33	120	408	259	2871	3538
Wilmington (50)	Yadkin Valley Umbrella Mitigat	116	194	101	411	151	208	770
St. Paul (92)	Braun Wetland Bank	105	247	60	412	0	206	618
Nashville (19)	Lick Creek Mitigation Bank #2	144	73	195	412	0	243	655
Baltimore (14)	Peige Mitigation Bank/Ecotone	112	57	245	414	199	1091	1704
Huntington (21)	Marytown Mitigation Bank, Long	126	62	227	415	281	277	973
St. Paul (92)	RFD II, LLC / Mitigation Bank	182	146	87	415	861	611	1887
Alaska (4)	William Redmond, Twentymile Ri	107	56	257	420	121	489	1030
Vicksburg (27)	Mississippi Fish and Wildlife	70	92	259	421	0	260	681
Huntington (21)	Ecosystem Investment Partners	126	148	147	421	280	166	867
St. Paul (92)	Watertown, City of / 30th Stre	168	181	72	421	1027	547	1995
St. Paul (92)	Cedarbend West Wetland Bank	122	155	148	425	1	178	604
New Orleans (53)	GWM, Inc. - 322.5 acre Woodlaw	361	51	13	425	200	1522	2147
St. Paul (92)	Willow Drive Mitigation Bank	124	158	144	426	92	1072	1590
Nashville (19)	Proposed Roaring Paunch Strea	130	91	206	427	66	329	822
Jacksonville (21)	MitBank - Lake Washington	248	95	84	427	149	791	1367
St. Paul (92)	Schrupp, Salz, and Wagener / C	270	117	41	428	458	629	1515
Wilmington (50)	RES_Dugout Stream and Wetland	161	151	117	429	2	684	1115
Little Rock (10)	Fourche Bayou Mitigation Bank	212	3	216	431	117	126	674

Norfolk (22)	Tail Race Stream and Wetland M	206	143	85	434	0	491	925
St. Paul (92)	Palmer, Gary / Wetland Mitigat	90	234	110	434	86	495	1015
St. Paul (92)	Cedarbend East Wetland Bank	136	155	148	439	1	164	604
Kansas City (13)	Sunflower Land Trust, Inc. Mit	91	112	236	439	253	2039	2731
Charleston (15)	Brosnan Forest Wetland Mitigat	77	229	134	440	1368	334	2142
New Orleans (53)	Cypress Plantation Mitigation	155	245	42	442	385	128	955
St. Paul (92)	UCWMB - Nemitz Mitigation Bank	289	82	71	442	0	1853	2295
Omaha (18)	Lyman-Richey Corporation, Miti	125	94	224	443	122	101	666
Nashville (19)	Big Spring Mitigation Bank	230	105	108	443	593	455	1491
New Orleans (53)	Jesuit Bend Mitigation Bank;	408	37	0	445	99	453	997
Norfolk (22)	Roanoke River Wetland and Stre	119	67	263	449	31	1000	1480
St. Paul (92)	Gary Starzinski/Potato Creek W	277	104	69	450	74	258	782
New Orleans (53)	Bayou Wauksha Mitigation Bank	85	306	64	455	590	187	1232
Los Angeles (8)	Colorado Lagoon Mitigation Ban	381	56	18	455	634	731	1820
Charleston (15)	Eagle House Stream Mitigation	62	64	329	455	2877	334	3666
St. Paul (92)	Timberg Creek Wetland Bank	95	237	129	461	252	289	1002
Norfolk (22)	Dog Branch Farm Stream and Wet	173	186	104	463	71	612	1146
Detroit (1)	Bjustrom- Openings Wetland Mit	184	119	161	464	981	625	2070
Jacksonville (21)	MitBank - Two Rivers Ranch	193	106	168	467	81	1063	1611
New Orleans (53)	Beacons Gully Mitigation Bank	18	422	32	472	200	189	861
St. Paul (92)	Wolf River Basin Mitigation Ba	100	238	135	473	87	136	696
Nashville (19)	Lick Creek Wetland Mitigation	32	71	371	474	35	169	678
Little Rock (10)	NATGAS - SEECO - Caney Creek M	166	37	273	476	2	912	1390
St. Paul (92)	McCue, William / Sibley Meadow	98	291	90	479	181	299	959
Sacramento (4)	Seigler Valley Wetland Mitigat	255	179	46	480	322	1340	2142
Pittsburgh (12)	Howdershelt Run Mitigation Ban	262	129	97	488	0	64	552
Huntington (21)	Lower Dempsey Mitigation Bank,	126	147	217	490	281	202	973
St. Paul (92)	Dean Spaeth / Mitigation Bank	132	246	112	490	1002	504	1996
St. Paul (92)	HRM Wetland Bank	91	253	148	492	432	197	1121
Norfolk (22)	Meadowlawn Mitigation Bank	144	43	307	494	368	1328	2190

New Orleans (53)	GWM, Inc. - 256.2 acre Madewood	344	125	26	495	178	1486	2159
Charleston (15)	Rocky Creek Mitigation Bank	79	96	322	497	132	1464	2093
Baltimore (14)	PSUMBI - Codorus Creek Stream	366	35	98	499	355	18	872
Little Rock (10)	ArDOT-Wiseman Mitigation Bank	29	184	290	503	200	150	853
St. Paul (92)	Mader Wetland Bank	241	157	110	508	106	269	883
Baltimore (14)	LRG UMBI - Tunnel Road Mitigat	218	170	121	509	0	276	785
St. Paul (92)	Chaska, City of / McKnight Wet	206	114	189	509	634	348	1491
Seattle (4)	Keller Farm Mitigation Bank	83	392	35	510	164	1076	1750
St. Paul (92)	Rochester, City of / Gamehaven	34	209	270	513	514	495	1522
Portland (6)	CITY OF SALEM STREAM MITTIGATIO	52	54	408	514	396	994	1904
New Orleans (53)	Leo Sternfels, Ronnie Foret -	105	128	284	517	569	1098	2184
St. Paul (92)	Blaine, City of / Site 7 Bank	227	207	90	524	356	731	1611
St. Paul (92)	Jerry Mueller Property Wetland	181	206	139	526	750	516	1792
Los Angeles (8)	Brook Forest Mitigation Bank	21	240	269	530	577	395	1502
St. Paul (92)	City of Superior SAMP II Wetla	105	102	324	531	31	838	1400
St. Paul (92)	Hasbargen's Wildwoods Bank	207	139	192	538	849	377	1764
Wilmington (50)	Yadkin Valley Umbrella Mitigat	253	179	118	550	14	206	770
New Orleans (53)	South Fork Coastal Mitigation	207	324	26	557	135	44	736
Jacksonville (21)	MitBank - Brandy Branch	503	63	6	572	1553	209	2334
Wilmington (50)	Neucon Umbrella Mitigation Ban	436	99	61	596	29	249	874
Jacksonville (21)	MitBank - Nature Coast	262	210	127	599	271	173	1043
St. Paul (92)	Bryce DeCook Wetland Bank	309	94	199	602	285	194	1081
Norfolk (22)	Potato Run Stream Mitigation B	117	244	241	602	326	894	1822
Albuquerque (1)	Maria Lake Mitigation Bank, Wa	56	29	523	608	48	643	1299
St. Paul (92)	Eifering Wetland Restoration (	177	96	340	613	0	1416	2029
St. Paul (92)	Pender, Howard/ Wetland Bank	172	319	127	618	1015	272	1905
Jacksonville (21)	MitBank - Mangrove Point	79	394	148	621	1821	1395	3837
Seattle (4)	Port of Tacoma Umbrella Bank	71	446	113	630	107	1497	2234
Huntington (21)	Hackers Creek Umbrella Mitigat	107	81	449	637	172	344	1153
New York (2)	Evergreen Environmental, LLC/E	93	36	516	645	0	635	1280

New Orleans (53)	GWM, Inc. - 116.6 acre Glenwoo	282	134	237	653	147	585	1385
St. Paul (92)	Steve McNallan Wetland Bank	576	73	4	653	111	1158	1922
St. Paul (92)	Kremer/Sonstegard Wetland Bank	158	344	157	659	146	161	966
Los Angeles (8)	Soquel Canyon Mitigation Bank	332	305	26	663	516	477	1656
Baltimore (14)	MD SHA UMBI/Albaugh Mitigation	129	509	29	667	317	1161	2145
Norfolk (22)	Wanocopin Creek Stream Restorat	220	282	170	672	0	128	800
New Orleans (53)	Bayou Thornton Mitigation Bank	252	322	99	673	736	673	2082
St. Paul (92)	Sheboygan County / Amsterdam D	145	216	313	674	357	1278	2309
Charleston (15)	Point Farm Salt Marsh Mitigati	268	144	268	680	4	380	1064
St. Paul (92)	Fifield Wetland Mitigation Ban	194	140	352	686	52	312	1050
Wilmington (50)	Neu-Con Umbrella Mitigation Ba	455	176	62	693	22	455	1170
Fort Worth (6)	Graham Creek Mitigation Bank	560	60	73	693	0	535	1228
Jacksonville (21)	MitBank - Withlacoochee (FKA -	195	440	65	700	301	842	1843
Savannah (7)	Phinizy Swamp Mitigation Bank	63	96	550	709	210	1335	2254
Kansas City (13)	Edmondson Creek Mitigation Ban	78	86	546	710	397	3330	4437
St. Paul (92)	Figliuzzi wetland bank plan ap	308	295	111	714	349	2457	3520
Vicksburg (27)	AHTD-Upper Saline River Mitiga	44	641	37	722	0	763	1485
Jacksonville (21)	MitBank - Tiger Bay	507	190	30	727	77	682	1486
Vicksburg (27)	AHTD-Bayou Meto Mitigation Ban	195	477	58	730	17	1475	2222
St. Paul (92)	Beartrap Creek Wetland Mitigat	643	53	50	746	0	387	1133
Chicago (4)	School Springs Wetland Mitigat	41	29	679	749	24	776	1549
St. Paul (92)	Grunewald Wetland Bank	479	131	144	754	498	446	1698
Jacksonville (21)	MitBank - Horse Creek	442	208	105	755	117	1592	2464
Nashville (19)	Livingston County Wetland Miti	377	15	365	757	802	710	2269
St. Paul (92)	Elkton Township Wetland Bankin	367	278	120	765	1825	39	2629
Jacksonville (21)	MitBank - Basin 22	516	19	256	791	1753	352	2896
Savannah (7)	Tallapoosa Mitigation Bank	142	187	470	799	138	285	1222
Jacksonville (21)	MitBank - Mill Creek	176	156	470	802	304	1219	2325
Vicksburg (27)	Pelican Mitigation, LLC/022712	77	589	148	814	82	0	896
Charleston (15)	Saluda Mitigation Bank	510	198	118	826	0	314	1140

Louisville (9)	Salt River Mitigation Bank, Mo	59	584	188	831	277	1196	2304
Fort Worth (6)	Straus Medina Mitigation Bank	186	39	622	847	22	334	1203
Wilmington (50)	French Broad UMB - Carolina Bi	603	169	84	856	0	74	930
Vicksburg (27)	AHTD - Red Chute Mitigation Ba	67	30	759	856	114	1342	2312
Norfolk (22)	R.A. Burgess Stream and Wetlan	148	226	556	930	0	1409	2339
St. Paul (92)	Haywire Point LLC Wetland Bank	128	3	807	938	1	542	1481
St. Paul (92)	Larson, James / James Larson W	395	57	516	968	36	127	1131
New Orleans (53)	Avoca Island Mitigation Bank -	828	132	18	978	656	403	2037
Vicksburg (27)	Franks Management Company/1208	861	22	96	979	153	30	1162
Kansas City (13)	Swallow Tail - Nishnabotna/Pla	486	177	329	992	35	228	1255
Baltimore (14)	Hop Bottom Creek Mitigation Ba	72	88	853	1013	334	864	2211
New Orleans (53)	Willow Lake Wetland Mitigation	829	48	142	1019	114	372	1505
Nashville (19)	Beech River Wetland Mitigation	648	114	267	1029	276	374	1679
Fort Worth (6)	Cypress Slough Mitigation Bank	7	1002	52	1061	671	31	1763
Little Rock (10)	Dutch Creek Mitigation Bank	335	729	2	1066	143	366	1575
St. Paul (92)	Mason Creek Wetland Mitigation	182	229	699	1110	329	446	1885
Jacksonville (21)	MitBank - Bear Creek	73	669	391	1133	144	2073	3350
Norfolk (22)	Benges Creek Mitigation Bank	113	53	973	1139	171	155	1465
St. Paul (92)	Woolan's Park mitigation area	692	176	299	1167	0	463	1630
Jacksonville (21)	MitBank - Horseshoe Creek	105	1029	110	1244	14	595	1853
Kansas City (13)	Smith Creek Wetland and Stream	365	249	832	1446	248	847	2541