

THE TIME IT TAKES FOR RESTORATION

COMPANION REPORT

A QUALITATIVE ANALYSIS OF FACTORS THAT
SPEED AND SLOW MITIGATION BANKING
APPROVAL TIMELINES



Ecological Restoration
Business Association



ENVIRONMENTAL POLICY
INNOVATION
CENTER

Note

This report is a complement to the qualitative analysis published in March of 2023, titled [The Time It Takes for Restoration: An Analysis of Mitigation Banking Instrument Timelines](#).

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.

Views expressed here are EPIC's and do not reflect the policy or positions of our funders.

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.

Both organizations engage in advocacy in the course of their work. The Research Findings section is a neutral synthesis, based solely on qualitative research (e.g., informational interviews). The Recommendations section includes ideas identified in the interviews along with recommendations proposed by the authors.

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- Fifteen anonymous mitigation bank sponsors who participated in informational interviews
- Two anonymous former US Army Corps of Engineers IRT chairs and regulatory employees who reviewed the recommendations in the report

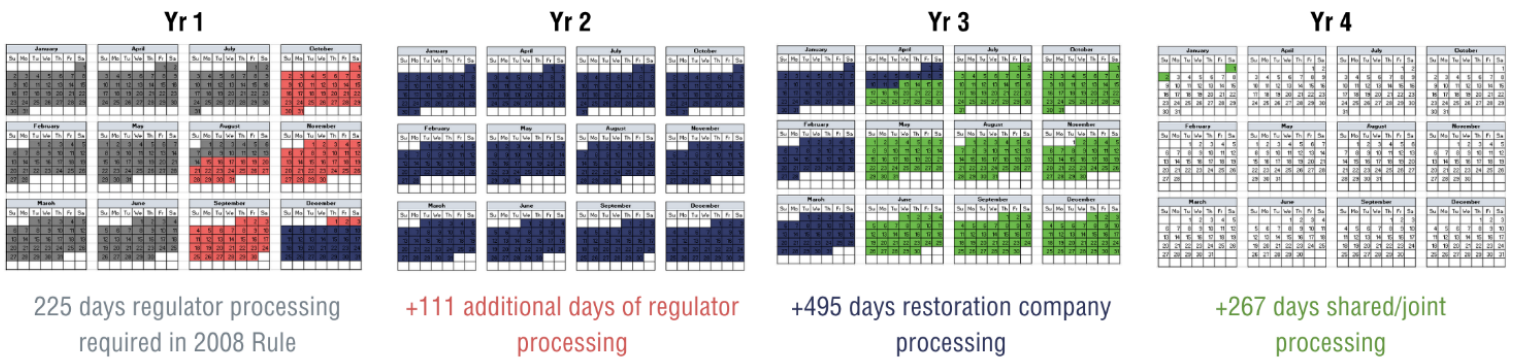
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EXECUTIVE SUMMARY

BACKGROUND

The 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (herein 2008 Rule) provides an approval process for mitigation bank instruments (MBIs) and in-lieu fee programs (ILFs). The 2008 Rule stipulated that the regulator’s side of the approval process (mandatory federal processing) take no more than 225 days. Previous quantitative research found that mandatory federal processing took 1.5 times longer than required in regulations, and the total processing time exceeded 1,000 days on average (Martin and Madsen, 2023). We also found that only 6 US Army Corps of Engineers Districts (Corps) in the analysis averaged less than 225 days for mandatory federal processing of MBIs, the remaining 30 Districts did not meet the required timeline on average.

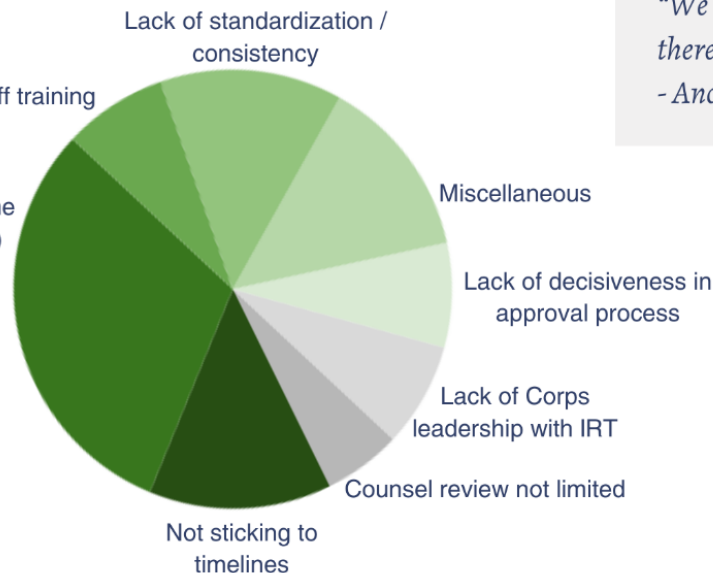
Total time to permit a wetland or stream mitigation bank - 1,099 days



The quantitative analysis, however, did not point to WHY timelines were delayed. The objective of this new phase of research was to identify bottlenecks and recommend solutions to speed the timeline. The research included in-depth informational interviews with 19 bank sponsors representing 70 banks in 17 Corps Districts across the U.S. The analysis only includes the perspective of the sponsors, as the authors were unable to interview counterpart regulators.

THE BOTTLENECKS

Interviewees identified the 'top 3' factors that created delays in the approval process.



“We gave up on thinking there’s deadlines.”
- Anonymous interviewee

“The larger issue is that staffing and expertise is paper thin.”
- Anonymous interviewee

RECOMMENDATIONS

Note: This is a synthesized version of the full Recommendations section in the report.

1. Address staffing issues. This was the most commonly cited change in interviews, but addressing this alone is not the silver bullet. The Corps could address staff-related issues and still fail to meet deadlines if leadership does not prioritize this work, if staff does not take the ‘decider’ role in the IRT, or if other changes noted here are not put in place. In short, issues that create bottlenecks are intertwined and a multi-pronged strategy is needed for meaningful and lasting change.

The Corps should: hire more staff with subject matter expertise (SME), train less experienced staff on mitigation banking concepts, dedicate staff time to the review and operation of mitigation banks and ILFs, address staff turnover, develop succession plans for staff, develop a standardized organization for mitigation bank files, utilize ‘Regulators without Borders,’ and adopt a short-term funding fix by tapping into the \$160M provided to the Corps’ Regulatory Division by the [Infrastructure Investment and Jobs Act](#) (IIJA). The Recommendations section also describes concepts for long term funding through increased permit fees (which would require an act of Congress), developing an MOU between a state agency and a Corps District, or utilizing the Section 214 authority of the Water Resources Development Act.

“You could double the staff but if the attitude is the same, you’ll get the same result.” -Anonymous interviewee

2. Address issues of standardization and consistency and ‘grandfather’ instrument reviews to the current version of templates. Templates, SOPs, and methodologies seem like a great way to streamline instrument review. Indeed, we heard in interviews that these tools create a more predictable environment than the ‘Wild West’ prior to adoption, but there are now 232 (!) templates, tools, guidelines, and methodologies across the Districts and implementation has not been ideal.

The Corps should: fast-track the review of documents that adhere to templates and other tools, minimize and justify any requests that deviate from their own templates, conduct an assessment of District templates and tools and create a national standard for templates that have no need for regional variation, and ‘grandfather’ banks into the template version existing at the time of submission of the draft instrument.

“We were held to things that were not policy at the time. Policy got there eventually but it wasn’t the policy at the time.” -Anonymous interviewee

“We’re asking soil scientists and fisheries experts to be a full shop - to be their own administrative staff, legal counsel, construction expert, and economist. It must be overwhelming for them.” -Anonymous interviewee

3. Create accountability for sticking to deadlines. All of the recommendations in this section could help Corps staff achieve the required timeframe, but a substantial shift will not happen without leadership prioritization and measures to hold staff accountable.

The Corps should: remove ‘sponsor’ time from its mission success criteria 5.1 and focus only on the 225 days of Corps processing, annually report to the public the national and District average federal processing time along with summary statistics, refine data entry in ORM, record the receipt of a complete prospectus so that this information is consistently recorded across the US, require staff to record the timestamp of the receipt of the draft final instrument, consider additional timestamps between receipt of a draft prospectus through the Corps deeming it complete, create automated flags in ORM to detect data entry errors, utilize the delay code in ORM, adopt an agency goal and performance metric to have equivalent or greater compensatory mitigation (e.g., credits available) than impacts (e.g., average annual permitting impacts requiring mitigation), and champion the use of mitigation banking.

4. Improve the IRT review process. The theoretical value of the IRT review process is the ability to have one, coordinated review by multiple agencies and reduce conflicting requirements. This is happening, to varying extents across the US. Interviewees, however, are experiencing multiple issues in the process that lead to delays in the timeline.

The Corps should: communicate that agency policy moving forward is to gain consensus (meaning, “I can live with it”) rather than unanimity from IRT members, limit IRT member review to the boundary of their agency authority and their SME, not consider IRT comments submitted beyond the deadline, track issues identified and resolved so that comments that are ‘closed’ stay closed, allow sponsors to share documents with the IRT directly, encourage PMs and IRT members to use the Initial Evaluation Letter to identify potentially unsuitable projects early in the process, and provide Corps IRT Chairs with training in facilitation.

“The IRT acts like they’re in charge.” -Anonymous interviewee

5. Adopt technology that addresses cross-cutting issues and sources of delays. The Corps should use part of its \$160M in regulatory funding from the IIJA to implement these recommendations for long-lasting staff time savings.

Multiple bottlenecks could be ameliorated through development and adoption of an online project management system custom to the instrument review process. This system would have the following capabilities:

- An online submission portal that would automatically check completeness based on objective templates / checklists
- Integrate templates, automate review, flag submissions that follow templates for fast-track review, and highlight deviations for templates to be reviewed by counsel. Allow space for sponsor &/or Corps/IRT/counsel to indicate justification for deviations from template.
- Integrate with ORM to create a 'timestamp' in a standardized way across all Districts, and add the capability to track more timestamps and 'whose desk' the application is currently on.
- Automatic development of Gantt-style timeframes for the overall timeline as well as intermediate steps.
- Record the version of the template in place at the time of submission of the draft instrument.
- A publicly facing dashboard of all instruments under review, with a progress bar for each instrument.
- The capability to focus / restrict commenting based on agency authority and SME.
- A place to collate commenting (like a shared Google document), track issues identified by the Corps and IRT members, record the agreed-upon solution, and close further commenting on the same issue.
- Automatic reminders of deadlines, and the ability to close comments on the document beyond the deadline.
- The ability for Corps leadership to evaluate performance to timelines.

As a near-term opportunity, the Corps could adopt several of the capabilities above by using &/or adjusting its ORM database and RIBITS tool. An alternative longer-term opportunity would be to adopt a system like Virginia's Permitting Enhancement and Evaluation Platform, or PEEP (created for Department of Environmental Quality permits).

6. Create limits to Corps counsel review. Generally, interviewees hoped that Corps leadership should create a clear pathway on legal review, and direct counsel to focus their review on substantive changes vs. semantics (or non-legal matters, as was experienced by one interviewee).

The Corps should: provide a directive to Districts that counsel review be completed within the deadline required for each stage of the instrument review process, and limit counsel review to the boundary of counsel's authority and SME. In the longer term, if the 2008 Rule is opened up for amendments in the future, it could include deadlines for counsel review, and require tracking the timestamp when complete documentation is submitted for review and the timestamp for when the review is complete.

WHAT ELSE IS IN THE REPORT?

- Additional detail on background and the methodology of the analysis.
- A synthesis of insight from interviewees on what slows and speeds mitigation bank review timelines.
- Separate summaries of factors that influenced timelines for slow and fast outlier banks.
- Separate summaries of factors that influenced timelines in Districts with slow and fast approval timelines.
- Commentary on when Districts 'start the clock' in data entry.

NEXT STEPS

This report is intended to be a jumping off point for adaptive management of the mitigation bank instrument approval process. The following are ideas for taking action on the findings of the research.

Dialogue with Corps mitigation banking staff. This report provides qualitative information from the perspective of bank sponsors only. Researchers attempted to include insights from informational interviews with District mitigation banking leads. Although there was initial leadership support for conducting interviews, a concern in one District put all conversations on hold beyond the timeline of this report. The researchers are in communication with Corps leadership to open an opportunity for input from Corps staff on what speeds and slows the instrument review process.

Dialogue between Corps staff and mitigation bank sponsors about opportunities for change. This report provides a number of recommendations synthesized from informational interviews and provided by the authors. It would be valuable to open dialogue between Corps staff and stakeholders to determine the most pressing as well as practicable recommendations to adopt in the near- and long-term.

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Background, Objective and Approach

Note: This research builds on a previous quantitative study [The Time it Takes for Restoration: An Analysis of Mitigation Banking Instrument Timelines \(Martin and Madsen, 2023\)](#). A brief summary of the catalyst and background information salient to this report is provided here. For additional background on compensatory mitigation of aquatic resources, mitigation banks, the timeline of approval of mitigation banking instruments, and steps in the approval process, please refer to [Martin and Madsen, p.12-18](#).

Background

The 2008 Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (herein 2008 Rule) provides an approval process for mitigation bank instruments (MBIs) and in-lieu fee programs (ILFs).¹ 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 (mandatory federal processing) take no more than 225 days.² Since the implementation of the 2008 Rule, mitigation bankers had provided anecdotes and internally-tracked data that suggested timelines were not being met, but Corps data had never been comprehensively analyzed. Quantitative research was conducted on close to 500 mitigation bank records approved between fiscal years 2014-2021. A statistical analysis of this data found that the Corps-responsible processing averaged 336 days, 1.5 times the required timeline. The full timeline of approval ranged from 78 days to 12 years and 4 days, with an average of 1,099 days.

Results from the quantitative analysis on MBI timelines only reflected what was recorded in the data and offered no details on what factors influenced timelines - for better or worse. We therefore undertook this second stage of qualitative analysis to provide context and insight to the qualitative analysis.

Objective and Approach

The **objective** of this research was to determine what factors were associated with slower or faster approval timelines, with the aim of identifying bottlenecks and potential solutions for expediting the approval process of MBIs (and the similar approval process for ILFs).

The **approach** of the research was to conduct in-depth informational interviews with a sample of mitigation bank sponsors across the country.³ In each Corps [Division](#) in the continental United States,⁴ we selected banks from at least 2 Districts within the Division (Figure 3). We attempted to select banks with a mix of fast, average, and slow timelines. We restricted our outreach to banks that were included in the dataset of the previous analysis, which covered FY 2014 - 2021 and included 496 approved MBIs after data cleaning. A total of 19 bank sponsors representing 70 banks in 17 Districts participated in 90-minute, confidential, informational interviews. This represents 17% of the banks approved during the FY 2014 - 2021 time period. Information in this report is 'rolled up' to assure anonymity.

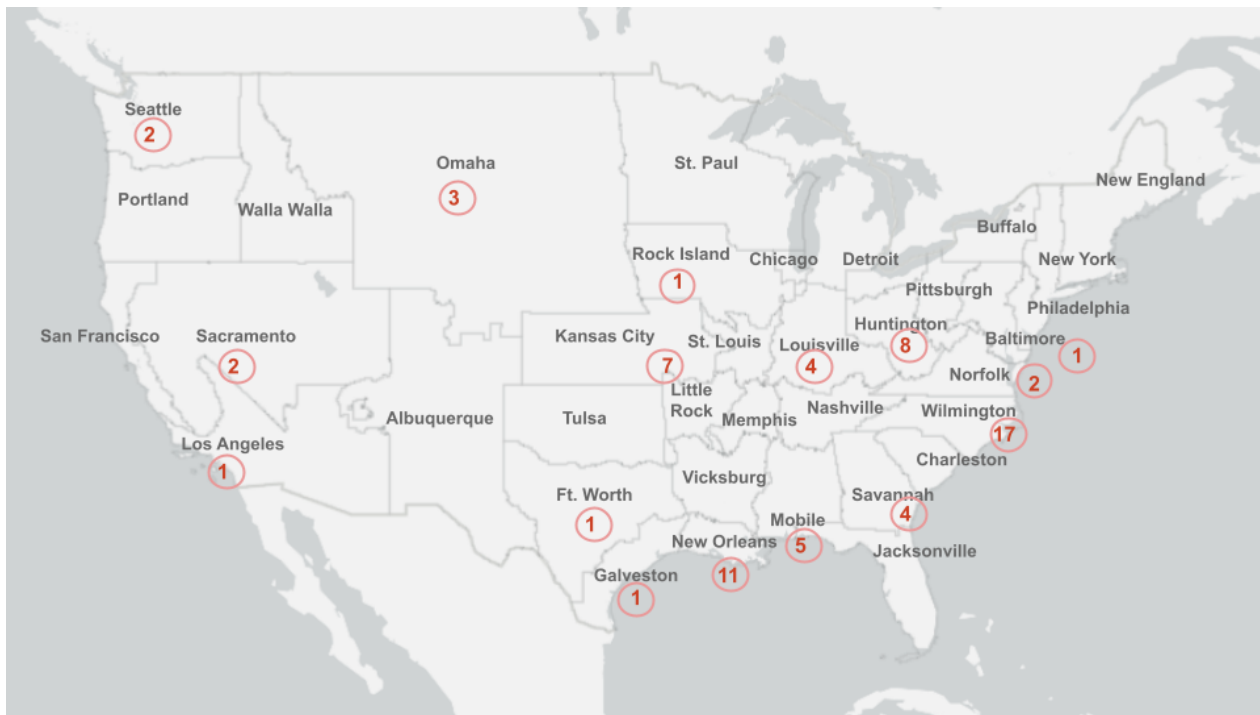
¹ EPA and USACE, 2008. Compensatory Mitigation for Losses of Aquatic Resources under CWA Section 404 (Final Rule). [Link](#).

² The 2008 Rule does identify several reasons for extending the federal processing such as government-to-government coordination, coordination with tribal nations, endangered species consultation, etc.

³ Note: We attempted to similarly interview Corps Districts but had not been granted permission as of June 2023.

⁴ The Pacific Ocean Division, which covers Hawaii (which has no banks) and Alaska (4 preservation banks in our dataset)

Figure 3. Corps Regulatory Districts and Number of Mitigation Banks Represented by Interviews



In determining the themes covered in the interviews, we reviewed previous research on [“Improving Compensatory Mitigation Project Review”](#) conducted by the Environmental Law Institute in 2020. Every theme discussed in the report was noted. Themes that recurred the most were captured and categorized into three main subject areas:

1. District resources, tools, processes
2. Sponsor and project
3. IRT and external agencies

Rather than ask individual, specific questions in the interviews, we generally asked mitigation bank sponsors to “tell the story” of their experience with the MBI approval process. After the interviewee was finished, we reviewed the themes in the slides to ask about any themes that had not been mentioned (see Appendix, Figure 7 for slides used in the interviews). We concluded the interviews by asking the participants to identify the ‘Top 3’ things their District is doing well to speed approval timelines, and the top three things that could change to help the approval timeline.

These ‘Top 3’ answers were reviewed, themes were identified, categories were coded by two researchers, and the few differences between the two researchers’ categories were reviewed and aligned. This method was undertaken to ensure that themes were categorized in a consistent manner. ‘Top 3’ themes were then summarized to create pie charts highlighting the top factors that affected the speed of approval timelines. Commentary from the interviews was summarized to provide detail on the top factors. The full transcripts of interviews were reviewed and themes that had not been noted in the ‘Top 3’ were summarized. Finally, recommendations indicated by the qualitative analysis were synthesized.

Several additional steps were taken:

- Slow and fast outlier banks were summarized separately (Box 1, Box 3)
- Districts with slow and fast approval timelines were reviewed and summarized (Box 2, Box 4)
- Commentary on when Districts ‘start the clock’ in data entry was summarized

Guide to the Report

1. **Findings** reviews the factors that speed and slow the MBI approval process, synthesized from interviewees' 'Top 3' responses and full transcripts. This is a neutral synthesis based solely on the informational interviews. This section also includes insight on: factors noted by bank sponsors in Districts with slow and fast approval timelines; insights from slow and fast outlier banks; and commentary on when Districts 'start the clock' in data entry.
2. **Recommendations** includes ideas identified in the interviews along with recommendations proposed by the authors.
3. **Appendix** provides additional figures and detail from the research.

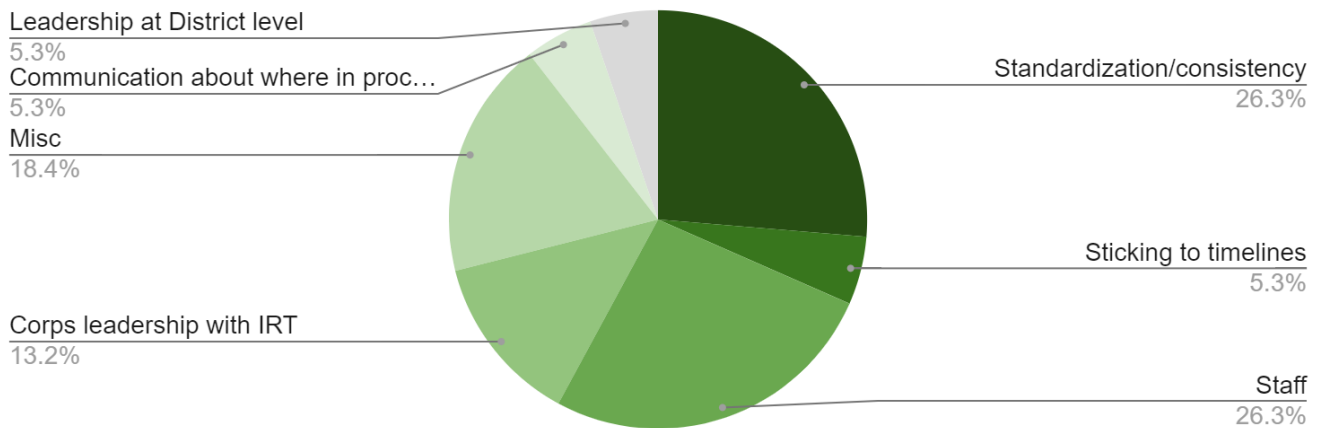
Findings

This section reviews the factors that speed and slow the MBI approval process, synthesized from interviewees' 'Top 3' responses and full transcripts. This is a neutral synthesis based solely on the informational interviews. The section also includes insight on: factors noted by bank sponsors in Districts with slow and fast approval timelines; insights from slow and fast outlier banks; and commentary on when Districts 'start the clock' in data entry.

Top Things That Speed the Approval Process

Participants were asked to identify the 'Top 3' things their District is doing well to speed approval timelines. The top themes are noted below.

Figure 4. Top Things That Speed the Approval Process



Standardization and consistency was cited as the top factor in speeding the approval process. Some specific examples included:

- Having a consistent method for determining a service area (mentioned in all but one interview)
- Using a standardized tool &/or having standardized credit quantification method (mentioned in the majority of interviews). One sponsor mentioned ease of filling out the tool as helpful, another sponsor thought a stream mitigation protocol was helpful.
- Using templates and checklists for parts of the instrument (prospectus, bank instrument, conservation easement, and long-term management plan templates)
- Using a calculator that makes long term management funding consistent
- Having consistency in financial assurances (one sponsor noted the District had a template)
- 'Grandfathering' banks already in the approval process into the current instrument template, rather than requiring the sponsor to update their instrument to a new and frequently unreleased standard.

In summary, having predictable methods or documentation meant that sponsors were able to understand what the District wanted and provide what they were looking for, and spend less in back and forth requests for changes. One sponsor speculated that it also saved Corps staff time, because they would not have to hunt for information in documents.

'Staff' encompasses a range of compliments we heard about dedication, experience, subject matter expertise (SME, and ability to source expertise within the District), responsiveness, accessibility, and approachability. Four interviewees thought there was adequate staffing in their District, the rest (11) did not. Three of the interviewees noted adequate staff correlated with bank sponsors that had faster than average approval timelines in their District. Another sponsor experienced a long approval timeline but did not think lack of staff was a factor. Having

a dedicated team also helped speed approval timelines. One sponsor mentioned that their District had ‘main’ project managers (PMs) as well as support staff. Lack of turnover was another factor seen to reduce timelines, which relates to developing SME and creating long-term working relationships that built trust. We heard in two Districts praise for current staff and anxiety that if just one staff member left, retired or went on medical leave, “all bets are off.”

Corps leadership with the IRT refers to comments we heard about appreciation for Corps staff being good project managers, coordinators, and facilitators of the multi-agency team that reviews instruments. Praise was given for staff who were able to keep a proposal moving forward, ensure that IRT members provided feedback in a timely manner, and when needed act as a ‘decider’ in instances of disagreements. One sponsor appreciated that the Corps did not reopen comments that had been previously discussed. In one District, the Corps would allow the sponsor to host a meeting with the Corps/IRT to walk through changes before they received the documents, which helped address any concerns and questions. Even something as simple as Corps staff quickly sending the IRT new documents from the sponsor, rather than letting things ‘sit in the inbox,’ was appreciated.

Sticking to timelines was appreciated by interviewees that saw staff making a concerted effort. One interviewee mentioned that a District had a goal related to timelines, another interviewee noted that an efficient project manager motivates others to stick to processing timelines as well.

On a related note, **leadership at District level** can speed approvals, for example by a Section Chief holding staff accountable to timelines, or providing leadership in implementing [RGL 19-01](#) (“guidance to USACE district engineers on credit release schedule for mitigation banks and on using consistent criteria to establish service areas for both mitigation banks and in-lieu fee programs”). Another interviewee commented that the approval process was faster when agency leaders were a “champion” of mitigation banking.

There is no ‘progress bar’ or dashboard for a bank in the approval process, so interviewees noted that they appreciated responsive **communication about where in the process** their bank was.

The **miscellaneous** category encompassed appreciation for a District’s flexibility to innovate (e.g., in determining how to deal with invasive species), and being consistent in the comments provided over multiple bank approvals.

Interviewees also expressed a few things that are not directly tied to the speed of approval timelines but nevertheless highlighted:

- Having a consistent credit release
- Appreciation that Corps staff followed the mitigation preference hierarchy / created a ‘level playing field’ between banks, ILFs and permittee-responsible mitigation (PRM)
- Allowing bank sponsors to enter debits into RIBITS

Additional Factors that Speed the Approval Process

In addition to categorizing interviewee’s ‘Top 3’ responses, the researchers also combed through interview transcripts to identify other factors that speed the approval process, from the perspective of mitigation bank sponsors.

Several sponsors mentioned that their **approvals went faster because another state or federal agency needed the credits** from their bank, and the approval process was informally prioritized. For example, one sponsor described an experience where Obama-era American Recovery and Reinvestment Act money was available to invest in a large infrastructure project in the District. The project, however, needed mitigation to move forward within three years, or the money would be reallocated. This situation put pressure on the Corps and IRT agencies to quickly

approve a mitigation bank. Relatedly, another sponsor noted that their District did not have many released credits available in a given service area and speculated that the approval process was faster for this reason.

Banker experience and reputation were also noted. One sponsor noted they had honed in on their mitigation plans: “we know what the Corps wants in our mitigation plans.” One sponsor also mentioned using a long-term management steward with a reputation for good work.

Other factors included:

- A small IRT, and experienced IRT members having good working relationships with other IRT members
- Having regular IRT meetings scheduled and having the ability to get banks on the agenda
- An online, shared calendar shared between the sponsor, Corps, and IRT members that included target timelines
- Closed comments that stay closed
- A less subjective crediting tool
- A simple restoration plan

Box 1. What is Happening with Banks That Were Fast Outliers⁵ with Regards to Approval Timelines?

We interviewed four sponsors of banks that were fast outliers. Banks A and B were in Districts with fast federal processing time (225 days or less on average), Bank C was in an average District, and Bank D was in a slow District.

Bank A (in District with fast federal processing). The sponsor of a lighting-fast bank attributed the speed of approval to sponsor experience and reputation, a simple restoration plan, an IRT consisting of the Corps and one other agency, and good working relationships between the sponsor and the agencies. The sponsor thought the Corps kept to deadlines with this fast bank and other banks in the District (the data support this). The sponsor also speculated that regulatory staff appreciated banks because they did not have many released credits available in the District. Other factors were simple credit determination and a long-term management steward with a reputation for good work.

Bank B (in District with fast federal processing). The sponsor thought approvals in the District were generally fast (the data supports this), and that this could partly be explained by limited participation by the IRT, staff leadership of the review process, and a long working relationship between the sponsor and the Corps PM. The sponsor mentioned that the Corps PM “did 90% of the work, which is not fair, but they do a great job.” The Corps staff also held the IRT to their timelines to keep the process moving, and “kept closed comments closed.” The bank was the second phase of an existing bank, so there was less review and negotiation.

Bank C (in District with average federal processing). The sponsor thought their experience in mitigation banking was a major contributing factor in the speed of approval - that they had the SME to create a quality MBI that was easy for the Corps to approve. Corps staff experience and lack of turnover also correlated with accelerating approvals for fast banks. The sponsor appreciated good Corps leadership and leadership with the IRT. The District’s crediting methodology had fewer subjective variables, giving more certainty and taking less time to negotiate in the approval process.

Bank D (in District with slow federal processing). Another fast outlier bank had been started out earlier as a different bank, then dropped, then repackaged and resubmitted. Thus, there was a fair amount of ground work already completed. The use of templates and checklists was seen to speed approvals. The sponsor had experience in mitigation banking, the project was not complex, and the IRT worked well together. The District also had a fast and responsive team dedicated to MBI review.

Several banks that were faster but fell outside of the top 5% had special circumstances that contributed to ‘fast’ timelines. For example, some instruments were modifications of previously approved instruments or were wrapped into an umbrella instrument. Another bank was previously submitted (with a different banker, as PRM) and so had an ‘early start’ on the process. Other banks were in Districts where sponsors ‘front load’ a lot of work and this time does not show up as part of the approval timeline data from the Corps (see below).

⁵ Fastest 5% of banks were reviewed, per the analysis in Martin and Madsen (2023)

Box 2. What is Happening in Districts with Faster⁶ Average Approval Timelines?

Insight on Districts is from the perspective of sponsors. Of the 10 Districts that had an average mandatory federal processing of 225 days or less, we interviewed sponsors in 4 of those Districts.

District A is associated with Bank A. See write up above.

District B is associated with Bank A. See write up above.

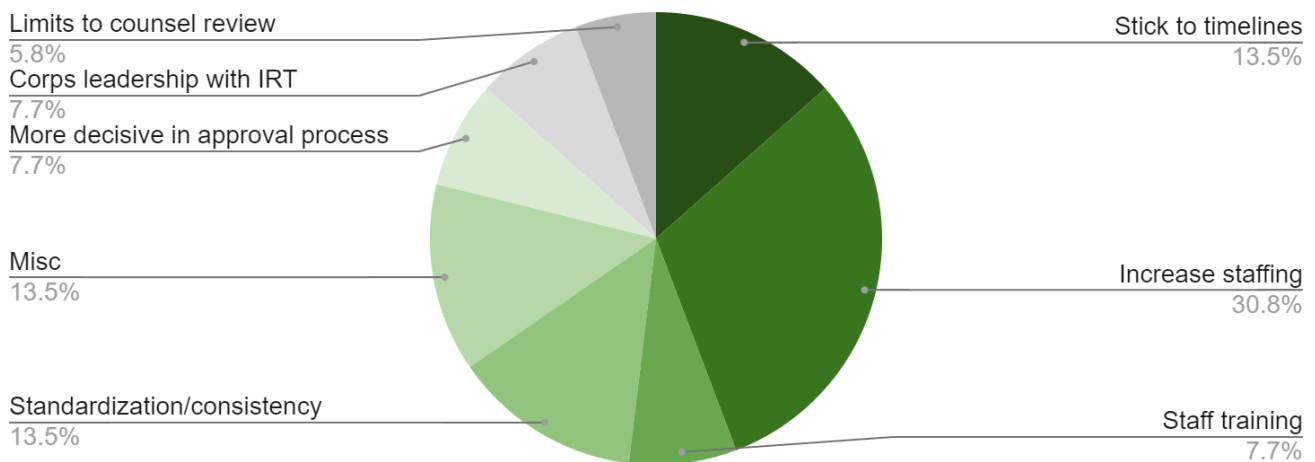
District C. A sponsor described that the District ‘front-loaded’ a lot of work to the prospectus stage, which could account for the data showing a faster timeline. In the District, the state agency involved in the IRT can ‘stop the clock’ for their separate approval process deadline. We do not know if this accounts for the Corps data showing shorter timelines. The sponsor noted that District staff were responsive despite there being high turnover (4 PMs during the duration of the project). District staff had good SME, and if a PM was not knowledgeable in a subject area, they could turn to other staff in the District for help. Additionally, there was good leadership in the District. The Corps would allow the sponsor to host a meeting with the Corps/IRT to walk through changes before they received the documents, which helped address any concerns and questions. One sponsor used a shared calendar with the Corps/IRT members that included target timelines. In the District, many parts of the approval process had been standardized (service area determination, long-term management plan, financial assurances, and instrument templates were mentioned). Two banks in the District had credits that were needed by other agencies, and approvals went through more quickly for this reason.

District D. This District has been highlighted as one of the Districts that do not ‘start the clock’ at the beginning of the process (see When Districts ‘Start the Clock’ below for further details). The sponsor viewed this District as having a very slow approval process that ‘front-loaded’ a large portion of work to the prospectus stage. Factors that an interviewee noted as speeding up the process in the District were leadership from the Regulatory Chief, and the IRT working well together.

Top Changes to Speed the Approval Process

Participants were asked to identify the ‘Top 3’ things their District could change to help the approval timeline. The top themes are noted below.

Figure 5. Top Changes to Speed the Approval Process



‘Increase staffing’ was the change consistently cited for speeding up the approval process.

“The larger issue is that staffing and expertise is paper thin.”

⁶ Districts whose average mandatory federal processing time was under the 225-day deadlines, per the analysis in Martin and Madsen (2023)

Only four interviewees did **not** mention the need to increase staffing for their 'Top 3' (see 'Top 3' Things That Speed the Approval Process for additional detail). Ensuring that existing staff could have time dedicated to the approval process was also cited, along with creating a dedicated mitigation team. Many sponsors brought up reducing staff turnover, noting from 2-5 changes in PM during the course of the approval process. Filling open positions, and ensuring succession planning was also noted. One sponsor said that their bank "fell off the rails" after the initial Corps PM retired. 'Regulators without Borders' was mentioned as an option to bring in staff from another District which could be good for speeding the timeframe, but could also create challenges when standard operating procedures (SOPs) were not in place with the home District. One interviewee thought that staff could prioritize their workload to spend more time on larger projects and less time on smaller projects. One interviewee pointed out that number of staff was not the sole solution to speeding timelines.

"You could double the staff but if the attitude is the same, you'll get the same result."

Several additional comments focused on **staff training**, including training in mitigation banking in general, project management, training in stream mitigation, providing the Corps/IRT with the opportunity to visit sites that are well-established to help educate staff, and providing staff with training or experience with permitting impacts to understand the other side of mitigation. One sponsor empathized with the difficulty in gaining relevant SME to review mitigation banks:

"We're asking soil scientists and fisheries experts to be a full shop - to be their own administrative staff, legal counsel, construction expert, and economist. It must be overwhelming for them."

Stick to the timelines was a common refrain, with some nuanced ideas like having District leadership hold staff accountable to timelines, leadership above the District level prioritize timelines so that there is accountability, improving the turnaround times from submission to response, and acknowledging that staffing levels are related to the ability to achieve timelines. In almost every interview, sponsors drove the tracking of deadlines. Sponsors described keeping their own Gantt charts, even sharing these with their Corps PMs, and almost universally were the 'owners' of keeping the process moving forward. Two interviewees noted that delays in review timelines compound themselves, as staff turnover during that time often is also associated with delays. Finally, "start the clock when the clock really starts" was a sentiment that came up in multiple interviews (see discussion later in When Districts 'Start the Clock').

"We gave up on thinking there's deadlines."

In terms of **standardization or consistency**, interviewees mentioned recommendations such as templates for all parts of the instrument (prospectus, draft instrument, final instrument), standardized financial assurances, performance standards, credit releases, processing of monitoring reports, and in one District, adopting a service area SOP. Interviewees also mentioned desiring consistent application of guidelines, templates or tools. There were also comments about eliminating or minimizing requests that deviate from standard procedures.

Decisiveness in the approval process was desired to eliminate drawn-out decisions and back-and-forth requests. Two interviewees preferred that the Corps/IRT give an early indication that a project was not desirable, rather than asking for more and more information. Two responses indicated that it would be preferable to 'get things right' early on to reduce unexpected late-stage requests. On the other hand, some interviewees noted that the downside of front-loading the process was that sponsors would invest a lot of money before getting an early indication of approval, which could motivate the sponsor to 'dig in' and negotiate in later stages. Another sponsor desired leadership to be more decisive on complex projects.

Some related comments focused on the Corps **leadership of the IRT**, including a general sentiment that the Corps should better lead the IRT.

“The IRT acts like they’re in charge.”

Other interviewees mentioned reducing duplicative review with IRT members &/or finding a better way to divvy up work, having the Corps push back on IRT comments that did not add value or that were minor in the big scheme of the project, having the Corps get the IRT to consensus instead of 100% agreement, and creating a process for checking in with the IRT if there is a concept change between submission of the prospectus and draft mitigation plan.

Some interviewees pointed out that there should be **limits to Corps counsel review** (note: legal review from IRT agencies was also noted and is discussed below in the Additional Factors that Slow the Approval Process section). There was a desire to generally reduce counsel review, create a clear pathway on legal review, and keep the review to substantive changes vs. semantics. One sponsor noted that counsel review was the biggest hold up. Another sponsor noted that there would be a six-month turnaround by Corps counsel if you requested a change in text from the standard templates.

The **miscellaneous** category included the following ‘Top 3’ ideas:

- Set times for scheduling IRT site visits
- Reducing review when templates are followed strictly
- Less design scrutiny by the Corps/IRT if full financial assurances are provided - in other words, allow the bank to take on the risk of design failure
- Create transparency of where the sponsor is in the approval process, such as Virginia does with their Permitting Enhancement and Evaluation Program ([PEEP](#))
- A better data input form for a District-level assessment method

Interviewees also expressed comments that we believe are not directly tied to the speed of instrument approval timelines but nevertheless highlighted:

- Timely credit releases - one sponsor noted that in their District, “There is no timeline” for credit releases
- A desire that Corps create a ‘level playing field’ between banks, ILFs and PRM
- Adopting credit ratios that buyers can understand

Additional Factors that Slow the Approval Process

In addition to categorizing interviewees’ ‘Top 3’ responses, the researchers also combed through interview transcripts to identify other factors that could change to speed the approval process, from the perspective of mitigation bank sponsors.

Multiple sponsors experienced **delays with requirements or “asks” that were added to existing guidelines, templates, or SOPs**. One interviewee felt that Corps PMs were “looking for perfection” and “they reject the good in favor of the perfect.” Two sponsors felt that added requests were made when the District did not like the project and it may have been easier to just hear that instead of being asked to provide more information. Sponsors thought that these additional requests could be because **the Corps was risk-averse**, even though there are ecological risk mitigation factors baked in.

“The Corps seems to think they are taking on risk but they are not. When they feel responsible, then they get into the design side of things, and they don’t have to.”

One sponsor commented on a requirement the Corps pushed for, and later rescinded that added about a year of back-and-forth. Some noted that new requirements came on the heels of a 'bad apple' actor or an issue coming up with one bank that became something that all banks had to address.

A related sentiment was '**surprise**' asks and comments that came in later stages of the approval process that had not been brought up earlier.

"We had about 300 comments on the final draft instrument, when we thought we were done... in fairness, it [the bank project] wasn't simple, but still..."

Several sponsors noted delays in updating their instrument to **draft or final changes proposed to templates and credit calculation methodologies** that occurred midway or even at late stages of the approval process.

"We were held to things that were not policy at the time. Policy got there eventually but it wasn't the policy at the time."

There were several comments relating to **newer site or land requirements**, including:

- Securing land title, which in one case "hit the pause button for years."
- New title search requirements
- Securing surface and subsurface mineral rights
- Resolving hydrologic issue

With regards to the **IRT**, some additional detail was brought up in interviews as factors slowing the approval process:

- Several state agencies involved in IRTs were described as having no timeline. One sponsor noted that the Corps tried to get complete agreement with all IRT comments, and gave IRT agencies "all the time in the world."
- IRT comments were not closed and there were "changes on the changes."
- Retirements or turnover of IRT member staff was a source of delay.
- Some IRT agencies were described as having a philosophical aversion to banking, with one IRT member resistant due to concern that a mitigation bank would allow more impact. Another IRT member was described as expressing a preference for onsite PRM.
- One bank was stalled in an IRT agency counsel review for over a year, including edits to established templates and comments on non-legal matters.

Several bank sponsors acknowledged **issues on the sponsor side** that added to review time, including:

- Bankers may try to optimize credit generation, and that can cause time spent negotiating credit determination. There was general acknowledgement that sponsors can "push too hard," which can backfire and slow the process.
- Lack of experienced because the project began just after the 2008 Rule was released
- Other bankers' inexperience in the District contributed to delays
- Acknowledgement that the project was complex due to dual-credit (joint authority) banking, potential hydrologic challenges, the large scale of the project, unique construction activities, or had complicated design
- Changing consultants during the approval process

Sponsors expressed frustration at an **inability to use existing opportunities for streamlining**. For example, one sponsor had to submit a formal MBI amendment for something that was included in the workplan.

Some sponsors saw **lags in particular parts of the approval process**, such as:

- Documents getting kicked back as 'incomplete' that sponsors do not agree with or that are for minor details
- The time between the Corps receiving a prospectus or draft instrument, and the Corps emailing that document to the IRT
- Crediting of enhancement was seen to involve discussions about what is enhancement versus restoration
- Determining what the appropriate monitoring should be to prove performance standards were met.
- Determining what the baseline is, particularly if extreme weather events changed conditions, or if the land had unique prior degradation, or if the approval process took so long that some aspect of the natural resources 'self-healed' beyond the baseline at the time of the initial evaluation letter.
- Use of SQT versus other credit calculations because SQT has high data requirements that take time, money, and expertise to collect.

"You need a PhD to get an instrument approved using SQT."

One reviewer noted the potential for endangered species and tribal coordination (government to government coordination) to delay the bank approval process. However, these issues clearly have to be resolved before a bank can be approved.

Several sponsors thought that **instrument approvals were not a priority with the Corps**. One sponsor noted that it was far easier to approve PRM than a bank in the District which is likely due to those projects not needing review by an IRT, and being approved by permit PMs who were seen as less stringent about approving restoration. One sponsor desired more Corps leadership at District level to implement [RGL 19-01](#).

Additional Factors Not Related to Speed of MBI Approvals

Interviewees also expressed a few things that are not directly tied to the speed of approval timelines but nevertheless highlighted:

- Front-loading work introduces risk to the sponsor: a lot of money is invested before the sponsor gets an early indication of likely approval. This could motivate the sponsor to 'dig in' and negotiate whereas another sponsor with lower sunk costs could more easily abandon a proposed bank if the Corps/IRT were not receptive.
- Two sponsors mentioned a previous conflict of interest in their IRTs: that an ILF (who are essentially competitors to banks) was a member of the IRT. In both Districts, this ILF IRT member was later dropped.
- Requests for credit releases are typically accompanied by hundreds of pages of monitoring information which can be overwhelming for staff to review and adds to their workload.

Box 3. What is Happening with Banks That Were Slow Outliers⁷ with Regards to Approval Timelines?

We interviewed three sponsors of banks that were slow outliers.

Bank E (in District with slow federal processing). This bank was started just after the 2008 Rule came out, so some delay could be related to the newness of the policy. There were delays relating to updating templates and credit calculation methodologies. The District strongly suggested that banks in the approval process change their instruments, which was not mandated, but the sponsor perceived that there would be multiple delays if they did not make the suggested changes. Late stage changes to documents was also an issue. The sponsor also noted lack of staff and turnover. IRT comments outside their SME delayed the process, due to the need to take time to address the comments. The sponsor thought it was far easier to approve permittee responsible mitigation than a bank in the District.

Bank F (in District with slow federal processing). The banker acknowledged that they had reputational damage with the IRT on a previous project. Perhaps relatedly, they noted that the Corps tried to get complete agreement with all IRT comments, which slowed the process. The sponsor noted that the Corps gave IRT agencies “all the time in the world” to respond to comments instead of holding them to timeframes. The sponsor also noted lack of staff and turnover (and IRT turnover as well). The bank “fell off the rails” after the initial Corps PM retired. The District actually has a goal to stick to timelines, but the authors are unsure when this goal was adopted.

Bank G (in District with average federal processing). The District wanted to improve the performance of banks and took steps to change baseline data, performance standards & target conditions, and credit calculations that - in the perception of the sponsor - doubled approval timeframes from a decade prior. The sponsor spent a long time resolving a land title issue that “hit the pause button for years.” The sponsor described the approval process as ‘front-loaded’ in the data and documentation/justification needed.

Box 4. What is Happening in Districts with Slower⁸ Average Approval Timelines?

Insight on Districts is from the perspective of sponsors. Of the 10 Districts with the slowest average mandatory federal processing, we interviewed sponsors in 4 of those Districts.

District E is associated with Bank E. See write up above.

District F is associated with Bank F. See write up above.

District G. The sponsor described this District as having a state agency that essentially led the IRT and was the biggest source of delay. IRT members provided comments that did not add value and re-opened closed comments, and the Corps did not push back on this. An IRT agency was described as having a philosophical aversion to banking. Another IRT member expressed a preference for onsite PRM. The bank was stalled for a year or more in an IRT agency’s counsel review, while the counsel made edits to established templates and commented on non-legal matters (e.g., biological subject matter, site design details). The sponsor also noted lack of staff and turnover (and IRT turnover as well). The sponsor had 5 different Corps PMs in addition to significant IRT agency staff turnover during the approval process. The sponsor acknowledged the project was complex (in part due to being a dual-credit bank). Securing land title was also an issue.

District H. In this District, the sponsor noted: “We gave up on thinking there’s deadlines.” Determining what the appropriate monitoring should be to prove performance standards were met was a problem for one bank after the MBI was signed. Corps counsel could also be a source of delays: the sponsor noted that there would be a six-month turnaround by Corps counsel if you requested a change in text from the standard templates. An IRT member was resistant to mitigation banking because they thought it would allow more development to occur. The District ‘front-loads’ a lot of the approval process for all the appendices such as service area, performance standards, bank design etc. before a draft MBI is submitted and the clock starts (“there is no draft instrument”), which could take a year at least. The bank was a dual-credit bank, which increased the agencies involved and increased the timeline overall. The sponsor thought that the Corps PM and other regular IRT members were frustrated by applicants with inexperienced staff submitting poor quality bank proposals not up to the standards they were looking for.

⁷ Slowest 5% of banks were reviewed

⁸ 8 slowest Districts for mandatory federal processing time were included

When Districts ‘Start the Clock’

A number of interviewees thought that Corps timeline data published in "The Time it Takes for Restoration: An Analysis of Mitigation Bank Instrument Timelines" did not match their experience of the timeline. Some suggested that the Corps ‘starts the clock’ up to halfway through the approval process. Others thought that the Corps could ‘game’ the timeline by concluding that a prospectus or draft instrument was incomplete, which puts the timeline back on the sponsor.

Two Districts were described in interviews as **having a reputation for very slow approval timelines, despite the data not showing them to be slow**. One sponsor described a District as being nationally notorious for how slow their process was. Another sponsor said it was “not worth it” to try and get a bank approved in the District.

Sponsors in five Districts noted that **a lot of work is ‘front-loaded’ on the sponsor** before an instrument can be submitted. This front-loading has the potential to make timelines appear faster, if the Districts are not recording a begin date when early documentation is submitted or if a sponsor is not allowed to submit documentation until their District’s requirements for the prospectus were met, which some described as much more detailed (an “MBI-lite”).⁹ In two Districts, sponsors contested the appearance of faster timelines, due to this ‘front-loading’ issue. However, the remaining three ‘front-loading’ Districts are showing slower timelines in the data, and sponsors did not contest the data.

In the database that Corps staff use to track timelines of mitigation bank approvals (called ORM), districts could enter the bank approval process ‘timestamp’ *prior* to submission of a complete prospectus, *with* the submittal of a draft prospectus, or submission of a pre application request to discuss a potential bank project.¹⁰ The available version of the Corps’ ORM database SOP does not provide guidance on when the DEVMB Action (the first timestamp) should be entered.¹¹

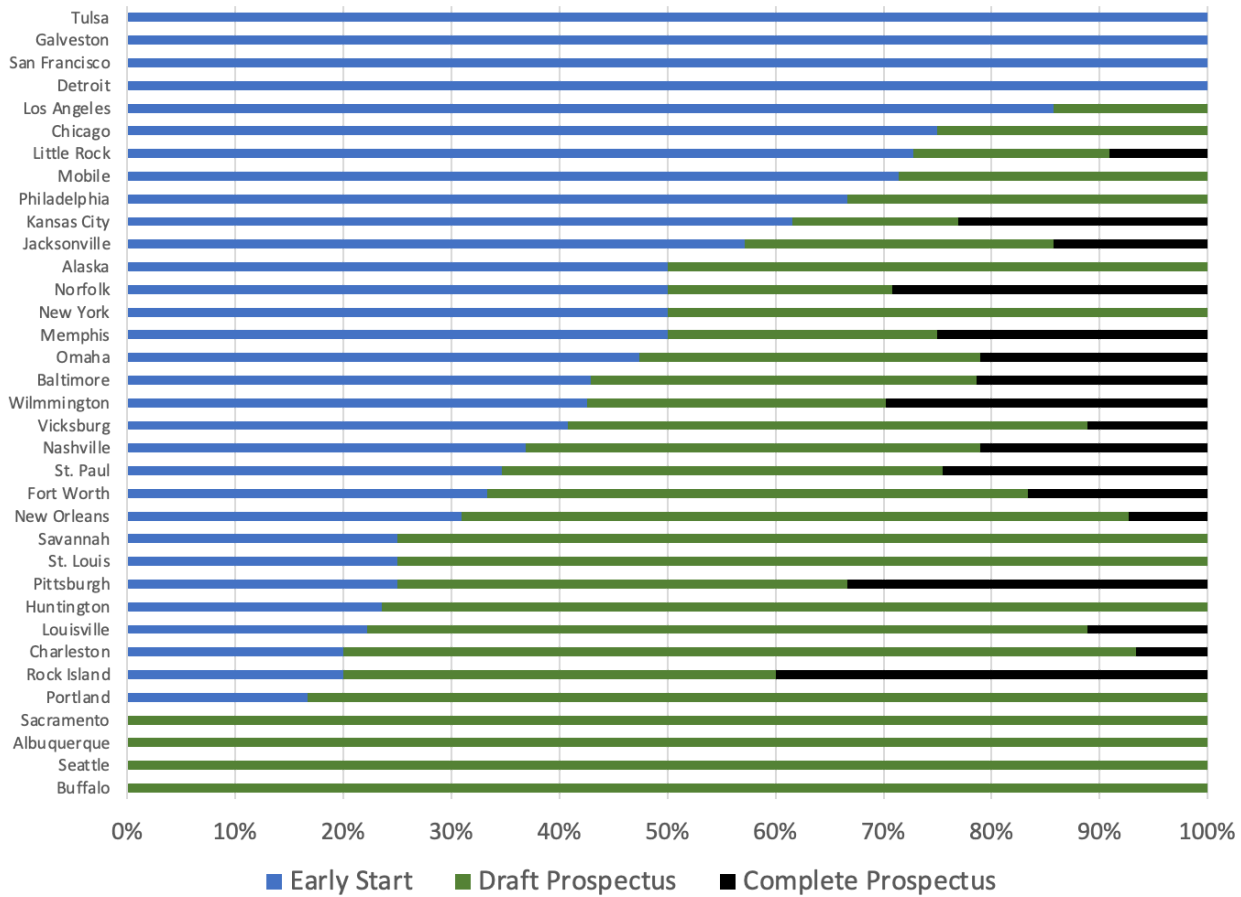
When we examined ORM bank processing timeline data from previous research ([Martin and Madsen, 2023](#)), we found that 4 districts (Detroit, Galveston, San Francisco, and Tulsa) began the clock in ORM prior to receipt of a draft prospectus. However each of those districts approved three or fewer banks in the study period (FY14-FY21). Four districts (Albuquerque, Buffalo, Sacramento, and Seattle) started the bank development action (DEVMB) with the receipt of a draft prospectus. However, two of those districts (Albuquerque and Buffalo) approved 1 bank each in the study period. The remaining districts (27 districts) started processing some records prior to receipt of a prospectus and others following receipt of a prospectus. Seventeen of those districts began processing for between 5 and 40% of records with the receipt of a complete prospectus (see Figure 6).

⁹ We note that Districts have leeway in documentation and preparation required for different stages.

¹⁰ Note that a draft prospectus is not required but is strongly recommended under the 2008 Rule, which introduces uncertainty in ‘when the clock starts’ (33 CFR 332.8(d)(3)/40 CFR 230.98(d)(3)).

¹¹ The ORM SOP we reviewed was version 1.1, dated 27 April 2009.

Figure 6. When Districts Start the Bank Approval Process



While we emphasize that sponsors' experiences of approval timelines may differ from what the data show, we could not find a correlation between the practice of front-loading work and Districts' approval timelines.

Survey Says... (Additional Ideas from Conference Polls)

The researchers used live anonymous polls in three different national conferences: the National Mitigation and Environmental Markets Conference ([May 2023](#)), the National Association of Wetland Managers' Annual State/Tribal/Federal Coordination Meeting ([May 2023](#)), and the State of the [Gulf] Coast Conference ([June 2023](#)). In each conference, the audience was asked: "What top things could change to speed up mitigation bank approvals?" There were a combined total of 166 responses. Many of the responses mirrored what the researchers heard in informational interviews, but there were also new ideas - some of which we believe is attributed to having regulators in the audience. The new ideas are noted below.

Box 5. Ideas from Conference Polls on What Could Change to Speed Up Mitigation Bank Approvals

<p>Sponsor / instrument</p> <ul style="list-style-type: none"> • Better proposals from sponsors (more complete, higher quality), to prevent multiple instrument drafts ("This is a huge time suck") • Early coordination with regulators • Better site selection • Quicker responses from sponsors <p>Standardization / consistency</p> <ul style="list-style-type: none"> • Develop templates for joint banks • Develop drop-down menus for performance standards • Use templates and standardized forms for describing projects • Provide reference sites and performance criteria • Create decision criteria for templates • Have Districts communicate their strong preferences for financial assurances, long-term stewardship, etc. • Abbreviated applications with less modules • Regulatory shouldn't have to write a huge decision document for a bank approval <p>Staff training</p> <ul style="list-style-type: none"> • Training and guidance to Corps general counsel on developing banking templates • Involve established, successful sponsors in Corps/IRT training • More joint training with all IRT members involved • Corps training to lead a process to reach an outcome 	<p>Technology</p> <ul style="list-style-type: none"> • Show a timeline progress bar and current position of the instrument that is incorporated into every email communication • Develop a better system for tracking handoffs to understand who is responsible at a given point • Everything digital in a shared work space for the sponsor and regulator <p>IRT / review process</p> <ul style="list-style-type: none"> • Regularly scheduled IRT meetings • IRT should come to a consensus in the comments before submitting to the sponsor to reduce conflicting comments • Higher level Corps staff engaged earlier (if they are going to be involved) • In person meetings to explain design and performance standards • In addition to comments/requests being collected earlier in the process, also communicate 'why' so sponsors can address this better <p>Miscellaneous</p> <ul style="list-style-type: none"> • Expand Nationwide Permit 27 • Development of regional general permits for third party mitigation • Performance based compensation for inspectors • Use UMBIs more for efficiency
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Recommendations

This section includes ideas identified in the interviews along with recommendations proposed by the authors, and next steps.

A great deal of information and insights were captured in the data analysis and informational interviews (see 'Findings' section). The information below does not capture all of the detail from the interviews, but provides a synthesis and recommendations from the authors, informed by the analysis.

Top Bottlenecks in the Mitigation Bank Instrument Review Process

The following bottlenecks were identified in the analysis.

1. **Lack of staff and other staffing issues** such as staff turnover, staff lacking time dedicated to the approval process, and staff lacking subject matter expertise in mitigation banking.
2. **Not sticking to the timelines**, in part due to a lack of Corps' prioritization of instrument reviews.
3. **Lack of consistency and standardization**, and requirements or "asks" that were added to existing guidelines, templates, or SOPs.
4. **Lack of decisiveness in the approval process**, leading to drawn-out back-and-forth requests.
5. **Lack of Corps leadership with the IRT** leading to added time reaching 100% agreement rather than seeking consensus.
6. **Delays from Corps counsel review.**

Recommendations

1. Address staffing issues¹². This was the most commonly cited recommendation in interviews, but addressing this alone is not the silver bullet. The Corps could address staff-related issues and *still* fail to meet deadlines if leadership does not prioritize this work, if staff does not take the 'decider' role in the IRT, or if other changes noted here are not put in place. In short, issues that create bottlenecks are intertwined and a multi-pronged strategy is needed for meaningful and lasting change.

1.1 The Corps should **hire more staff with subject matter expertise (SME, see Box 6 for a concept note on how the Corps might determine adequate staffing levels), and train less experienced staff on mitigation banking concepts**. Training should be seen as an investment that pays off in the longer-term in reduced staff time needed for instrument reviews.

1.2 Corps Districts should **dedicate staff time to the review and operation of mitigation banks and ILFs**. Districts should have a dedicated mitigation banking lead and a mitigation banking team of 2 or more staff should be established in districts dealing with many bank proposals. At least one District has support staff assisting the lead project managers with aspects of coordination and scheduling, which alleviates the project manager's workload and better utilizes their expertise.

1.3 The Corps should **address staff turnover** by identifying financial compensation (e.g., increasing the GS/salary level to recognize the SME and leadership role that staff play), other forms of compensation, and other agency changes that could create a more desirable working condition and longer term tenure of staff.

¹² This was the first of two main solutions identified by ERBA in its recommendation to the Corps to adopt a [Regulatory Guidance Letter on mitigation delivery](#) to expedite the Corps' ability to responsibly permit infrastructure and accelerate private investment towards our national environmental goals (April 6, 2022).

1.4 **As a short-term funding fix, the Corps should use part of its \$160M in regulatory funding from the Infrastructure Investment and Jobs Act (IIJA)** to implement recommendations 1.1 - 1.3 in Districts with the largest gap between demand for compensatory mitigation for permitted impacts to wetlands and streams and the pending supply of mitigation from mitigation bank and ILF instruments in the review process. This will simultaneously speed the timeline of review of these instruments, save regulatory staff time (it's faster for staff to review permits using bank or ILF credits than permits creating PRM ([Hough and Harrington, 2019](#)), and allow more needed IIJA-funded infrastructure projects to be completed. While there may be reluctance to hire permanent staff using funds that are available for a limited time, the authors are aware of one Corps Division that is using IIJA funds to hire term or temporary employees. Other IIJA funds could be directed toward activities that could create long-lasting staff time savings (see related Recommendation 5 for ideas on adoption of technology). Box 6 outlines a potential long-term funding concept.

1.5 The Corps should **develop succession plans for staff**. This should include direction that new staff start the review process where the predecessor left off and 'closed comments should stay closed,' meaning, decisions made by previous staff (including decisions on prospectus, initial evaluations of prospectus, draft instruments, and monitoring reports) should stand.

1.6 The Corps should **develop a standardized organization for mitigation bank files** that applies to all districts. That way incoming staff and supporting staff from other districts can pick up a file and determine quickly where the review left off. See related Recommendation 5.

1.7 Corps Districts could utilize '**Regulators without Borders**' if the home Districts will accept the decisions made from the instrument review. The Corps could consider limiting 'Regulators without Borders' to aspects of the instrument that do not require regional ecological expertise.

1.8 The Corps should **conduct an audit of staff hours dedicated to instrument review and estimate mitigation demand** to Determine whether Corps Districts have adequate staffing levels to meet compensatory mitigation needs.

Box 6. Concepts for Long Term Funding of Corps Staff Dedicated to Instrument Reviews

As a long-term funding fix, [404\(d\) permit fees](#) - which currently range from \$0 to \$100 - could be increased to cover the cost of staff time reviews of compensatory mitigation¹³ and the Corps could be allowed to retain the fees. This would require an act of Congress because under federal administrative law, permit fees are categorized as 'miscellaneous receipts' and do not stay with the agency, but go to the US Treasury (per [31 USC § 3302](#)). Congress then approves agency budgets, so the funding level for appropriate staffing is a political decision. The [Sikes Act](#) (passed in 1960 and amended in 1997) is an example of an act of Congress that allows the US Army to collect and retain fees from forestry operations and leases, with the fees directed to wildlife management activities on installations. Our professional guess is that it takes hundreds of hours or more of agency staff time to review and approve a mitigation bank. This is not borne by the permittee¹⁴, so the cost of impacting wetlands and streams in the United States is artificially reduced, which lowers the monetary incentive to avoid impacts. Another way of saying this is that US taxpayers are helping to fund permit processing for developers and others that obtain permits for impacts to wetlands and streams.

(Box 6 continued below)

¹³ If the cost of staff time review were only borne by the sponsors of mitigation banks and ILFs, their per credit cost would go up but the cost of PRM would remain artificially low and there would likely be more developers proposing PRM rather than following the (more expensive) mitigation hierarchy.

¹⁴ Nor is the cost of wetland ecosystem services borne by the permittee (e.g., see [Moeltner et al., 2019](#) for a synthesis of wetland values in the academic literature).

(Box 6 continued)

An alternative staff funding source could be a memorandum of understanding (MOU) between a state agency and a Corps District, whereby the state agency completed much of the mitigation bank review and that agency could collect fees (ex:

[Norfolk District and Virginia Department of Environmental Quality MOU regarding implementation of the third party compensatory mitigation program, April 2023](#)).

Finally, [Section 214](#) of the Water Resources Development Act (2000 and as amended) allows the Corps to accept funds from public entities (state, local, or tribal agencies), public utilities, natural gas companies, and railroad carriers to expedite permitting efforts that have a public purpose. This has been used in a number of districts including the Los Angeles District by the state department of transportation and by local government agency associations for staff review of compensatory mitigation proposals including mitigation banks. With congressional approval, this authority might be used/expanded to support review of private sector mitigation that serves a public purpose, such as compensatory mitigation for public infrastructure (roads, highways, water supply, etc.)

We note that implementing any of these concepts would require a long-term strategy. It also would address funding levels for staff, but would not guarantee speedier instrument reviews in and of itself.

2. Address issues of standardization and consistency and ‘grandfather’ instrument reviews to the current version of templates. Templates, SOPs, checklists, and methodologies seem like a great way to streamline instrument review. Indeed, we heard in interviews that these tools create a more predictable environment than the ‘Wild West’ prior to adoption, but implementation has not been ideal.

2.1 The Corps should **fast-track the review of documents that adhere to templates and other tools**. When documentation such as conservation easements, escrow, or endowments are adopting the very templates that the Corps has created and counsel approved, these documents should be approved. There could be an online submission of a template, with fast-track review or deviations highlighted for Corps counsel review.

2.2 The Corps should **minimize and justify any Corps requests that deviate from their own templates**. For sponsors, these requests were understood when it was seen to benefit the resource, but requests described as non-substantive or requests that did not add value to the instrument were a source of frustration and delays that could be minimized.

2.3 **Standardize the standardized**. There are over 232 templates, tools, guidelines, and methodologies across the 38 Corps Districts that the authors have identified on RIBITS and District Regulatory websites. While there may be an *ecological* basis for having a variety of tools and methodologies in the Districts, we wonder how many of these 232 templates are administrative in nature and might be simplified. We also question why some Districts *lack* these administrative templates. The Corps Institute for Water Resources, EPA, or an external organization should **conduct an assessment of District templates and tools and identify administrative templates that have no need for regional variation** (e.g., financial assurances, long term management). Template language could be issued nationally on the specific aspects identified in the assessment. We acknowledge that variation at the District level may be required due to differences in state law. As well, the 2008 Rule gives authority of implementation of the Rule to District Engineers. The assessment should also identify where regionally relevant templates or tools are lacking and could be developed to improve approval timelines (e.g., SOPs for service area determination, standardized processing of monitoring reports). Districts should also develop and make publicly available an **objective set of criteria for determining ‘completeness’** of the prospectus, draft and final instrument.

These criteria should not be subject to IRT consensus *although co-chairs may choose to weigh in on completeness determinations*.¹⁵

2.4 When templates or methodologies are in the process of changing, allow the bank that is already in the approval process to use the existing template version and associated guidelines in effect at the time the draft instrument is first submitted for review (aka **'grandfather' banks into the earlier version**) instead of asking banks to revise their instrument; this revision process has been blamed for increasing delays and costs. The Corps already adopts a similar 'grandfathering' approach in jurisdictional determinations. Even though the definition of Waters of the United States (WOTUS) has changed over the years, the Corps records which version of WOTUS the jurisdictional determination has been conducted under.

3. Create accountability for sticking to deadlines. All of the recommendations in this section could help Corps staff achieve the required timeframe, but a substantial shift will not happen without leadership prioritization and measures to hold staff accountable. *Note: accountability related to the IRT is noted below.*

3.1 The Corps should **remove 'sponsor' time from** its mission success criteria 5.1 and focus only on the 225 days of Corps processing required by the 2008 Rule. The current metric evaluates the number of banks approved within 550 total days, which includes both Corps time and sponsor time. The Corps should **annually report to the public** the national and District average federal processing time, along with summary statistics.

3.2 The Corps should **refine its data entry in ORM**. First, to ensure that metrics across Districts are comparable, Corps leadership should circulate a memo directing staff to record the receipt of a complete prospectus so that this information is consistently recorded across the US. This should partially address the critique heard in multiple interviews: "start the clock when the clock really starts." *Note: the following were recommendations made in [Martin and Madsen, 2023](#).*

The Corps should **require staff to record the timestamp of the receipt of the draft final instrument**. Currently this is not recorded, only the time when the final instrument is deemed complete. The problem with this is that there is no way to disaggregate the Corps' required review time vs the time a sponsor is responding to requests and thus, any metric that aims to evaluate *only* Corps-responsible time will not be possible without this timestamp. The Corps should also **consider additional timestamps** between receipt of a draft prospectus through the Corps deeming it complete, and the time between receipt of a draft instrument and Corps deeming it complete. The Corps should **create automated flags in ORM to detect** 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 as this functionality could reduce the number of errors in the database." Staff could be encouraged to **utilize the delay code in ORM**, which could indicate when staffing, workload, federally-listed species, government to government coordination, or other issues are leading to delays.

3.3 The Corps and EPA should **adopt an agency goal and performance metric to have equivalent or greater compensatory mitigation (e.g., credits available) than impacts** (e.g., average annual permitting impacts requiring mitigation), with a means to track and report on this goal. This goal/metric would provide accountability to approval timelines by tying the Clean Water Act's no net loss policy goal with a

¹⁵ Completeness determinations are the Corps' responsibility not the IRT's (see 33 CFR 332.8(d)(2)/40 CFR 230.98(d)(2) and 33 CFR 332.8(d)(6)/40 CFR 230.98(d)(6)).

means to track whether the amount of approved restoration and conservation of wetlands and streams balances impacts.

3.4 Corps leadership at the district, division, and HQ levels should **champion the use of mitigation banking** to signal the importance of the timeline of approvals. The 2008 Rule lays out the potential ecological superiority of mitigation banks. Leadership from the top should communicate that reviews are important and should be prioritized. Districts should be held accountable for missed or delayed processing deadlines. Corps HQ should consider commending/calling attention to the Districts that are generally meeting processing timeframes. This is one way to identify a path for other Districts to consider.

4. Improve the IRT review process.¹⁶ The theoretical value of the IRT review process is the ability to have one, coordinated review by multiple agencies and reduce conflicting requirements. This is happening, to varying extents across the US. Interviewees, however, are experiencing multiple issues in the process that lead to delays in the timeline. *Note: See Recommendation 5 for opportunities to automate the review process.*

4.1 The Corps should **communicate that agency policy moving forward is to gain consensus (meaning, “I can live with it”) rather than unanimity¹⁷ from IRT members.** The 2008 Rule indicates that the Corps will use a consensus approach to the extent practicable while following the decision-making timelines laid out in the regs (33 CFR 332.8(d)(7)/40 CFR 230.98(d)(7). Gaining consensus in group facilitation involves identifying areas of strong disagreement and having the dissenter propose a constructive adjustment that will make the proposal acceptable to them¹⁸ (see related Recommendation 4.7). **If, after working with the IRT there remains a block to consensus, the Corps PM should exercise the leadership role (‘decider’ role) that the 2008 Rule clearly assigns to them.** The perspective of interviewees was that Corps PMs often did not use this authority, but rather deferred to the requests of IRT members because of agency culture or to maintain collegial relationships. The Corps should exercise their chair / co-chair authority to be the decider even absent consensus.

4.2 **IRT member review should be limited to the boundary of their agency authority and their SME.** This eliminates duplicative review and comments not rooted in expertise in a subject area. Interviewees also suggested that PMs should consider whether IRT comments are adding value to the instrument. Additionally, interviewees hoped detailed discussions of design criteria could be minimized by reminding the IRT that ecological risk mitigation factors are built into the instrument and credit release process. Sponsors prefer less design scrutiny when full financial assurances are provided and a sponsor has a track record of successfully meeting ecological performance standards. Interviewees expressed that additional ‘asks’ felt like the Corps PMs were “looking for perfection” and “rejecting the good in favor of the perfect.” Corps staff could better **differentiate “must have” vs. ‘like to have” IRT comments on products** (draft prospectus, prospectus, draft instrument, etc.) so sponsors know which ones must be addressed to advance the review process.

4.3 Because late IRT comments threaten the Corps’ compliance with regulations, **Corps leadership should communicate that the default position of the IRT Chair should be to not consider IRT comments**

¹⁶ This was the second of two main solutions identified by ERBA in its recommendation to the Corps to adopt a [Regulatory Guidance Letter on mitigation delivery](#) to expedite the Corps’ ability to responsibly permit infrastructure and accelerate private investment towards our national environmental goals (April 6, 2022).

¹⁷ “The focus on establishing agreement of at least the majority or the supermajority and avoiding unproductive opinion differentiates consensus from unanimity, which requires all participants to support a decision” (Wikipedia entry for consensus decision-making, 2023).

¹⁸ Some examples of consensus decision-making techniques can be found in the Wikipedia entry for consensus decision-making, and “Getting to Yes Using 5-Finger Consensus” (LeadStrat, 2023).

submitted beyond the deadline, unless some critical issue has arisen such as the occurrence of a recently listed species, government to government coordination, or identification of a previously unknown historic or cultural resource.¹⁹

4.4 Corps PMs should **track issues identified and resolved so that comments that are ‘closed’ stay closed**. See related Recommendation 5. Corps PMs should also dissuade late-stage ‘surprise’ asks and comments from the IRT, and ensure that substantive issues are addressed earlier in the process.

4.5 The Corps should **allow sponsors to submit documents with the IRT directly**, rather than submitting documents to the Corps to distribute to the IRT.

4.6 The Corps should **encourage PMs and IRT members to use the Initial Evaluation Letter to identify potentially unsuitable projects early in the process**. Interviewees noted they would appreciate early decisiveness over requests for more and more information.

4.7 The recommendations above are a lot to ask of one individual (or one agency), but investments in training and technology (see Recommendation 5) can provide a return in time savings for staff which translates to a faster review process. The Corps should **provide Corps IRT Chairs with training in** how to facilitate a group process efficiently (including the use of modern remote working methods and tools²⁰), resolve conflicts, and reach consensus. See related Recommendation 1.3.

5. Adopt technology that addresses cross-cutting issues and sources of delays. The Corps should use part of its \$160M in regulatory funding from the [Infrastructure Investment and Jobs Act](#) (IIJA) to implement these recommendations for long-lasting staff time savings.

Multiple bottlenecks could be ameliorated through development and adoption of an **online project management system to the instrument review process**. It is important to follow a user-centered design process that prioritizes and releases features iteratively, and builds off and connects with existing systems (e.g. through use of APIs²¹), thereby only creating new features and tools where necessary. This system would have the following capabilities that relate to the recommendations noted above:

- An **online submission feature** that would **automatically check completeness** based on objective templates / checklists (Recommendation 2.5), and return an error if an item was missing. Documents could be **automatically shared with the IRT** (Recommendation 4.5).
- **Integrate templates, automate review**, flag submissions that follow templates for fast-track review, and highlight deviations for templates to be reviewed by counsel (Recommendation 2.1). Allow space for sponsor &/or Corps/IRT/counsel to indicate justification for deviations from template (Recommendation 2.2).
- **Integrate with ORM to create a ‘timestamp’ in a standardized way** across all Districts (Recommendation 3.2), and add the **capability to track more timestamps and ‘whose desk’ the application is currently on** (Recommendation 3.2).

¹⁹ The Mitigation Rule contemplates limited scenarios when the stipulated deadlines may be extended, stating: “Comments received after these deadlines will only be considered at the discretion of the district engineer to the extent that doing so does not jeopardize the deadlines for district engineer action” and goes on to explicitly list the few justifications for an extension.

²⁰ Corps PMs could consider scheduling working calls and using techniques such as the Pomodoro method to work through issues efficiently.

²¹ An API is type of software that allows two different systems/computer programs to communicate with each other. Source: <https://www.ibm.com/topics/api>

- **Automatic development of Gantt-style timeframes** for the overall timeline as well as intermediate steps (Recommendation 1.2).
- **Record the version of the template in place** at the time of submission of the draft instrument (Recommendation 2.4).
- **Public transparency of all instruments under review, with a progress bar for each instrument.** We recognize that personally-identifiable information has been raised in the past as a potential concern, but we feel this is something that can be overcome with prudent safeguards.
- The capability to **focus / restrict commenting based on agency authority and SME** (Recommendation 4.2).
- A place to **collate commenting** (like a shared Google document), **track issues** identified by the Corps and IRT members, **record the agreed-upon solution**, and **close further commenting** on the same issue (Recommendation 1.5).
- **Automatic reminders of deadlines**, and the **ability to close comments on the document beyond the deadline** (Recommendations 1.5, 4.3).
- **Authorize sponsors to upload credit sales and bank related documents into RIBITS** (sales agreements, monitoring reports, draft instruments, etc.). This would take some workload off Corps staff, allowing them more time for instrument review and oversight. Sponsors have a vested interest in ensuring that RIBITS data entry is accurate. A number of checks have been built into RIBITS to minimize entry error by Sponsors.
- The ability for **Corps leadership to evaluate performance to timelines** (Recommendation 3.1).

5.1 A near-term opportunity to incorporate several of the capabilities above would be to tap into capabilities &/or adjustments to ORM and RIBITS. **ORM-tracked review data could be pushed through a web service to a dashboard available on RIBITS.** RIBITS has the requisite capabilities and the Corps, IRT, and Sponsor all have access to the system and could make updates. Districts could also more consistently and completely **utilize RIBITS' existing calendar and push notification features** to prompt automatic IRT reminders on upcoming deadlines and communicate approvals and notifications to other regulators, sponsors, and the public. The Corps should **assess staff use of RIBITS' functionalities and what works well and what changes could be adopted to make them usable.** The Corps should budget and plan for the continued use and improvement of RIBITS, and modernize its design (see [EPIC case study](#) for additional detail).

5.2 An alternative longer-term opportunity would be to **integrate proven features that work from a system like Virginia's Permitting Enhancement and Evaluation Platform, or PEEP** (created for Department of Environmental Quality permits). PEEP is "... a publicly-accessible online platform where anyone can search and find details about a permit and where it is in the approval process" (see Environmental Policy Innovation Center's case study: [If You Can Track a Pizza, You Can Track a Permit](#)). Beyond providing information, the program includes many of the capabilities noted above.

6. Create limits to Corps counsel review. Generally, interviewees wanted Corps leadership to create a clear pathway on legal review, and direct counsel to focus their review on substantive changes rather than semantics (or non-legal matters, as was experienced by one interviewee).

6.1 In the near-term, the Corps should **provide a directive to Districts that counsel review be completed within the deadline required for each stage of the instrument review process.**

6.2 **Corps leadership should limit counsel review to the boundary of counsel's authority and SME** (e.g., on substantive legal matters). As noted in Recommendation 2.1 and 2.2, where templates exist, counsel review could be limited to / focused on deviations from templates adopted at the District level.²² Counsel deviations from their own templates should be a rare occurrence and justified.

6.3 In the longer term, if the **2008 Rule is opened up for amendments in the future, it could include deadlines for counsel review**, and require tracking the timestamp when complete documentation is submitted for review and the timestamp for when the review is complete.

Next Steps

This report is intended to be a jumping off point for adaptive management of the mitigation bank instrument approval process. The following are ideas for taking action on the findings of the research.

Dialogue with Corps mitigation banking staff. As we noted in the caveats earlier in the report, this report provides qualitative information from the perspective of bank sponsors only. Researchers attempted to include insights from informational interviews with District mitigation banking leads. Although there was initial leadership support for conducting interviews, a concern in one District put all conversations on hold beyond the timeline of this report. The researchers are in communication with Corps leadership to open an opportunity for input from Corps staff on what speeds and slows the instrument review process.

Dialogue between Corps staff and mitigation bank sponsors about opportunities for change. This report provides a number of recommendations synthesized from informational interviews and provided by the authors. It would be valuable to open dialogue between Corps staff and stakeholders to determine the most pressing as well as practicable recommendations to adopt in the near- and long-term.

²² In Recommendation 2.3, we mention the potential for a national template to be adopted for certain administrative aspects, with adjustment made where necessary by state law. The deviations of import are the deviations of the templates adopted at the District level.

Appendix

Figure 7. Slides Used in Informational Interviews

<div data-bbox="191 449 427 487" data-label="Section-Header"> <h2>Bank Interview</h2> </div> <div data-bbox="191 504 431 548" data-label="Text"> <p>Discussion of Factors Affecting Timelines</p> </div> <div data-bbox="240 581 375 600" data-label="Text"> <p><i>Reminder: start recording</i></p> </div> <div data-bbox="500 371 725 506" data-label="List-Group"> <ul style="list-style-type: none"> • Themes we will cover <ul style="list-style-type: none"> • District resources, tools, processes • Sponsor and project • IRT and external agencies </div> <div data-bbox="516 533 730 594" data-label="Text"> <p><i>Improving Compensatory Mitigation Project Review (Kihlsinger et al., 2020)</i></p> </div> <div data-bbox="716 317 756 359" data-label="Image"> </div> <div data-bbox="164 638 760 653" data-label="Page-Footer"> <p>Environmental Policy Innovation Center (EPIC) 15</p> </div>	<div data-bbox="852 327 1274 361" data-label="Section-Header"> <h2>District resources, tools, processes</h2> </div> <div data-bbox="852 396 1206 604" data-label="List-Group"> <ol style="list-style-type: none"> 1. Allocation of Bank & ILF workload in district <ul style="list-style-type: none"> ◦ Dedicated staff? Enough? 2. Templates, guidelines, SOPs, checklists 3. Project management, process schedule, deadlines, tracking </div> <div data-bbox="1247 491 1386 552" data-label="Text"> <p>Tools/templates we are aware of (share screenshot)</p> </div> <div data-bbox="1386 317 1427 359" data-label="Image"> </div> <div data-bbox="829 638 1425 653" data-label="Page-Footer"> <p>Environmental Policy Innovation Center (EPIC) 16</p> </div>
<div data-bbox="185 703 431 737" data-label="Section-Header"> <h2>Sponsor and project</h2> </div> <div data-bbox="185 770 730 987" data-label="List-Group"> <ol style="list-style-type: none"> 4. Complexity of project 5. Quality of site, quality of prospectus/draft instrument, experience of sponsor 6. Standardized/consistent vs. case-by-case <ul style="list-style-type: none"> ◦ Credit determination ◦ Service area determination ◦ Responsibilities required in long term management plan ◦ Level of financial assurances, long-term management funding </div> <div data-bbox="716 693 756 735" data-label="Image"> </div> <div data-bbox="164 1014 760 1029" data-label="Page-Footer"> <p>Environmental Policy Innovation Center (EPIC) 17</p> </div>	<div data-bbox="852 703 1169 737" data-label="Section-Header"> <h2>IRT and external agencies</h2> </div> <div data-bbox="852 770 1386 995" data-label="List-Group"> <ol style="list-style-type: none"> 7. IRT / other agency staffing 8. Internal communication, meetings (regularly scheduled?), site visits 9. Method for: <ul style="list-style-type: none"> ◦ Divvying tasks ◦ Agreement/disagreement ◦ Aggregating/tracking comments and responses ◦ Delays in reviews 10. IRT Sponsor communication level 11. 404/401 state permitting, ESA, historical resources 12. IRT involvement in policy (development of tools, guidelines, assessments, etc.)? </div> <div data-bbox="1386 693 1427 735" data-label="Image"> </div> <div data-bbox="829 1014 1425 1029" data-label="Page-Footer"> <p>Environmental Policy Innovation Center (EPIC) 18</p> </div>
<div data-bbox="185 1081 256 1115" data-label="Section-Header"> <h2>Top 3</h2> </div> <div data-bbox="191 1148 725 1291" data-label="List-Group"> <ul style="list-style-type: none"> • Out of all the factors discussed <ul style="list-style-type: none"> ◦ What are the top 3 things your District is doing the best? ◦ What are the top 3 things that could change that could really help the timeline (/facilitate processing)? </div> <div data-bbox="716 1066 756 1108" data-label="Image"> </div> <div data-bbox="164 1392 760 1407" data-label="Page-Footer"> <p>Environmental Policy Innovation Center (EPIC) 19</p> </div>	Empty slide content

ABOUT EPIC

The mission of the Environmental Policy Innovation Center (EPIC) is to build policies that deliver spectacular improvement in the speed and scale of conservation. EPIC focuses on a narrow set of strategies:

- Improving policies that allow private sector funding or stewardship to expand or supplant public or charitable conservation work
- Transforming government policies to focus on what matters—outcomes
- Eliminating the organizational barriers that prevent public agencies from adapting to 21st century solutions

Housed within the EPIC, the Restoration Economy Center envisions a world where environmental restoration outpaces environmental impacts. We champion pathways to achieving greatly scaled environmental restoration outcomes.

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