

Item 23 - 2: Office of Water Resources FTE Increase - Pawnee**Initiative Type:** Unconstrained – Expansion**Initiative Owner-Finance:** Clara F. O’Brien – DEQ CFO**Initiative Owner-Program:** Leslie Knope – DEQ Executive Director**Initiative Priority Ranking:** 2**Initiative Financing Details****Budget Impact Details—Change to Current Services Level of Financing**

	Agency Request – Constrained	Agency Request – Unconstrained
General Revenue:		\$250,000
Federal Funds:		\$250,000
All Funds:		\$500,000

Revenue Impact Details—Change to Revenue Estimate

	Agency Request - Constrained	Agency Request – Unconstrained
Revenues		\$2,500,000

Bottom Line Impact

	Agency Request – Total
All Funds:	\$2,000,000

Proposal Background**Proposal Overview:**

Please provide a 3-5 sentence “elevator pitch” about this initiative. Include the initiative name, the funding requested (by fund source), and the top three most important things to know about the initiative and the problem to which it is responsive. You can choose whether to format this as a list or a paragraph.

In FY 2021, the Indiana Department of Environmental Quality (DEQ) requests \$500,000 from all sources of funds, including \$250,000 from general revenue, to hire 4.0 additional FTEs at Environmental Protection Bureau’s Office of Water Resources. Recent data from inspections by the

state's Office of Internal Audit indicates that the Office of Water Resources is lacking in capacity to divert and/or mitigate pollution resulting from both stormwater and wetlands development projects. The hiring of additional FTEs for the Office will respond to this issue by facilitating the provision of improved regulatory assistance, increasing the Office's capacity to review permit applications and reforming the permitting process, and improving the Office's ability to oversee and improve pollution mitigation efforts at the local community level. The four positions are: 2.0 Environmental Scientists, 1.0 Senior Environmental Scientist, and 1.0 Supervising Environmental Planner.

Opportunity Statement: 

In this section, clearly explain the problem that exists today and the opportunity that your request aims to capitalize on. The best opportunity statements thoroughly explain, with as much detail as possible: (1) where we are today; (2) where we want to be in the future; and (3) why there is the gap between where we are and where we want to be. The best opportunity statements also quantify key variables wherever possible.

One of the primary responsibilities of DEQ is to review and evaluate project permit applications in multiple programs in order to ensure that proposed projects and activities in the state meet federal and state environmental regulatory requirements, account for necessary pollution mitigation efforts, and protect the state's natural resources to the maximum extent possible. Another primary responsibility is to assess stormwater pollution levels in state water resources and mitigate pollution as necessary. In 2019, the Office of Internal Audit reviewed several processes, including wetlands development permitting and stormwater pollution testing, at DEQ's Office of Water Resources (OWR); their final report uncovered a number of problems, including holes in the permitting process and a dearth of on-the-ground employees conducting necessary pollution testing across the state. These problems have led the state of Indiana to lag behind its regional counterparts in the speed and thoroughness of the permitting process, especially for projects taking place in similar communities like Pawnee (defined as those with a population of 5,000 or less). They have also led to a 50% increase in total population levels in smaller communities over the last decade.

The issues with timely and thorough processing of permit applications are a relatively recent development; over the course of the last few years, wetland permit applications have come to reflect projects and site conditions that are generally more complicated than was the previous norm, and the number of environmental regulations that must be followed and examined by OWR for most projects increased from 15 in 2009 to 30 in 2019, without a corresponding increase in staff. Further, the increased pace of business brought about by an uptick in development in small communities – with permit applications increasing 100% between 2009 and 2019 – has made more timely decisions critical to the viability of projects. In practice, this has often meant that permit applications receive only a cursory review from OWR staff, who are burdened with heavy permit caseloads, or their review is delayed by months or years. This poor permitting process for development affecting wetlands has led to development projects polluting water resources in small

communities, and developers abandoning projects outright – over the past two calendar years, 20% of small community development projects subject to wetlands permitting procedures have been cancelled or abandoned. Delays in permitting timelines may also have a negative impact tax revenue and, in the long run, the economic growth of the state.

The Office of Internal Audit report also found that Indiana has fewer FTEs per land acreage directly testing water pollution through stormwater than our neighbors. Indiana has 3 FTEs testing stormwater for every 50,000 acres of land, while Wisconsin has 8, Ohio has 7, and Michigan has 5 per the same amount of acreage. Recent inspections through Pawnee, in coordination with the Pawnee Office of Parks and Recreation, have revealed higher than average levels of pollution in the community’s water resources – Pawnee’s water quality is generally 10% worse than that of larger Indiana communities, and, on average 20% worse than average water quality in neighboring states. Indiana DEQ currently has no employees dedicated specifically to developing pollution mitigation strategies with small communities; as a result these strategies are currently piecemeal at best or nonexistent at worst.

In an ideal future state, the Indiana OWR would have the capacity to timely review all wetlands permit applications in full, with staffing levels that would allow them to fully and completely process each permit within four weeks of receipt. The Office would also have the capacity to work hand in glove with smaller communities in the state to develop and operationalize pollution mitigation strategies, as well as increase its stormwater testing capacity in these communities by at least 50%. Currently, the lack of staff capacity makes both of these things impossible.

Proposal Details: 

Provide a detailed description of the initiative you are proposing to respond to the above-described problem and capitalize on the above-described opportunity. Your narrative here should clearly describe how your intervention, if funded, could close the gap described above and achieve the desired future state. It should not restate your narrative in the “Proposal Overview” section; rather, it should expand upon that narrative with additional details, quantifying key variables wherever possible. For constrained proposals, your narrative should clearly explain why your agency has chosen to propose this cut over other potential reduction items and detail the expected impact of the reduction on agency mission, goals, and operations.

In order to address the above-described issues, DEQ proposes adding 4.0 additional FTEs to the Office of Water Resources, in order to (a) increase staff capacity to review permits, improve permit review quality, and reduce staff permit caseloads (2.0 FTEs) and (b) increase staff capacity to regularly test water pollution levels in water resources in smaller communities and improve on-ground support provided from the state OWR to individual small communities (2.0 FTEs). The Department recommends adding 4.0 FTEs to the Office of Water Resources to ramp up efforts to

better permit wetland development projects, and to better respond to stormwater pollution in small communities.

On the permitting reform side, the 2.0 FTEs will include a Senior Environmental Scientist to oversee the implementation of the reformed process and an Environmental Scientist to assist in reform implementation. The addition of a Senior Environmental Scientist with permitting experience will be instrumental for overhauling the process in order to prioritize timely and thorough review. This employee is expected to spend the first two months in their role development and implementing a new process, including by creating new permitting templates and training staff in new review processes. Both the Senior Environmental Scientist and Environmental Scientist FTEs will engage in permit review, helping to mitigate burdensome caseloads. The addition of these FTEs will be preliminarily considered successful if caseloads at OWR can be reduced from 200 permits per FTE per year to 120 permits per FTE per year, a level that is more in line with the national best practice standard of 100 permits per FTE per year as advocated for by the federal Environmental Protection Agency. Correspondingly, the addition of these FTEs is expected to reduce the average timeline for permit review from three months (12 weeks) to one month (four weeks) or less. In the long term, the addition of these FTEs and overhauling of permitting processes is also expected to lead to a reduction in pollution levels and a reduction in the percentage of development projects that are abandoned prior to completion. With more staff available to share the work at OWR, applications will receive more thorough review, deficient applications will not slip through the cracks, and permits will be issued in a timelier way, avoiding construction delays that jeopardize projects under the current system.

On the storm water testing and pollution, the 2.0 FTEs will also include a Senior Environmental Scientist and an Environmental Scientist; the former will oversee stormwater pollution mitigation efforts and development of improved strategies in small communities (specifically, Pawnee, IN and Eagleton, IN), while the latter will support the implementation of new pollution mitigation strategies. Both employees will assist with regular water quality testing, increasing the water quality testing workforce from 3.0 FTEs for every 50,000 acres of land to 5.0 FTEs, a level that is in line with similar offices in Michigan and close to the levels of other peer states, including Wisconsin and Ohio. Increasing staff capacity at the OWR water testing unit will allow staff to dedicate resources to developing community mitigation strategies and proactive pollution reduction plans for the first time. The dedication of state resources to pollution mitigation at the individual community level is expected to lead to a reduction in average pollution levels at the local community level as well as statewide. The Senior Environmental Scientist FTE is expected to spend the first two months in their role working through design sprints with community Parks and Recreation department leadership and developing new strategies based on learned information, and then to spend six months operationalizing new processes in partnership with local communities. DEQ expects that the new strategies, coupled with an increased in water testing frequency, to lead to decreased water pollution within one year.

Utilizing increased Water Quality Management Planning (CFDA: 66.454) grant federal funding from EPA, DEQ recommends financing half of the cost (\$250,000) of the FTE increase with federal funding. DEQ requests \$250,000 in general revenue funding for this initiative.

FTE Details & Requirements:

For initiatives proposing expansion or contraction of current programs, provide details here about how many FTEs currently work on the program and the total cost of salaries and benefits for those FTEs.

For all initiative types, if the proposal would require the elimination of existing FTE positions or the hiring of new FTEs, provide a detailed overview of how the initiative would impact FTE levels. Be sure to include the titles or anticipated titles and total salary and benefits costs for impacted staff or proposed new staff in your narrative here.

If this proposal would not impact agency FTE levels and/or does not involve an existing program, simply include the following narrative: This proposal would not have an impact on FTE levels.

4.0 FTE Increase:

- Environmental Scientist Total salary and benefits cost: \$100,000. Pay Grade: ABC.
- Environmental Scientist Total salary and benefits cost: \$100,000. Pay Grade: ABC.
- Senior Environmental Scientist Total salary and benefits cost: \$150,000. Pay Grade: ABCD.
- Supervising Environmental Planner Total salary and benefits cost: \$150,000. Pay Grade: ABCD.

Timeline for Implementation: 

Describe how long the initiative will take to implement and by what date it will be fully implemented. If the initiative will not be shovel-ready on July 1, make sure you explain how you have adjusted the budget estimates to reflect the requisite ramp-up period for the initiative.

Positions will be posted on July 1st, 2022. The department anticipates that the hiring process will take approximately six weeks, with new employees being onboarded on or before August 15th, 2022. New employee orientation is expected to take approximately two weeks, and the 4.0 additional FTEs will be available to begin work on or before September 1st, 2022.

Future Expected Costs:

In this section, provide a brief overview of how initiative costs are expected to increase or decrease in future years and fill out the below table detailing projected costs for the next five fiscal years. If costs are expected to change over time, be sure to explain why that is expected to occur. If the initiative is time-limited or has a defined sunset date, note that here and explain why.

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
General Revenue:	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020
Federal Funds:	\$255,000	\$260,100	\$265,302	\$270,608	\$276,020
All Funds:	\$510,000	\$520,200	\$530,604	\$541,216	\$552,040

A 2% inflationary increase was applied to salary and benefits for each fiscal year from FY 2024 – FY 2028.

Evidence Base

Evidence Scale Ranking: [2]

Please rank the proposed initiative’s current level of evidentiary support on a scale from 0-5, based on the RI Evidence Scale, with one being the least evidentiary support and five being the most evidentiary support.

You can use tools like the [Pew Results First Clearinghouse](#) and the database to determine whether the type of initiative that you are proposing has been rigorously evaluated in other jurisdictions. The Office of Management & Budget understands that the majority of agency requests will likely not be in the top evidence tiers at the point of submission, and you should certainly feel free to submit requests that are “theory-based” on the scale rather than “promising” or “proven effective.” Please note that “theory-based” submissions should include a robust and compelling measurement and evaluation plan in the Performance Measurement section.

Description of Evidence Base:

Describe the justification for your evidence scale ranking. What evidence exists that makes you think that the proposed initiative will work? Where is there uncertainty of effectiveness? It is helpful to include citations, links, or attachments of the evidence source(s) that you draw on in making this assessment.

DEQ’s theory that increased staff resources will improve the permitting process and lead to lower levels of water pollution statewide is based on expert opinions from DEQ leadership and water quality experts nationwide, including at the federal EPA, as well as anecdotal evidence from peer states.

DEQ Executive Director Leslie Knope has opined that, in her experience in the environmental protection sector, increasing staff resources allocated to oversight of pollution in communities tends to lead to improved outcomes in those communities. She points to her experience leading the Pawnee Department of Parks and Recreation, noting that when she increased the number of scientists dedicated to testing Pawnee’s water resources, the community saw a 20% pollution reduction over three years. Additional staff resources make early detection of pollution possible,

allowing agencies to nimbly respond to evidence of pollution and implement mitigation strategies quickly.

In 2019, federal EPA Director Ron Swanson published a report penned in collaboration with several top Environmental Scientists at the EPA ([link](#)) in which he noted an anecdotal link between increasing the agency's water testing crops and the slight decrease in water pollution seen between 2015 and 2019 at the national level.

Finally, in the Michigan DEQ annual report in 2018 ([link](#)), that agency boasted of a 10% drop in pollution from 2016 to 2018, which they tied to increasing staff capacity to conduct water quality testing, rolling out a new wetland development permitting process, and developing community-level strategies for pollution mitigation.

While specific research studies related to this proposal do not exist, and the impact of staff levels on water pollution levels has not been causally proven, there is ample anecdotal evidence to support DEQ's proposal. If funding for this initiative is approved, DEQ would be interested in working with the Indiana University Environmental Science program to develop a study of the causal impact of staffing levels on water pollution levels, including stormwater pollution and wetland pollution from development projects.

Evaluation & Performance Measurement

Existing Performance Data:

For Unconstrained – Expansion, Constrained – Adjustment, and Constrained – Elimination

Initiatives: *Describe the data that currently exists for this initiative and your agency's approach to performance measurement and evaluation of the initiative. If you don't collect any performance data on this initiative, you should explain why data is not available. If you do collect performance data, your narrative should include details about the types of data collected and the sources of that data, note the specific metrics that are tracked for the initiative, and, wherever possible, report the metrics for the last three fiscal years. If you've used the data to make programmatic changes in the past, you should include details about that. Your narrative should make clear whether or not the available data indicates that this initiative has been successful in reaching its goals.*

For Unconstrained – New Initiatives: *Simply include the following narrative: This is a request for a new initiative about which the agency does not currently collect any data.*

DEQ's evaluation of the success of OWR turns on that office's ability to ensure that water resources in Indiana's cities and towns are clean and free of pollution. Therefore, the key metric indicating OWR's success, or lack thereof, is water quality. Over our many years of operation, we have learned that one thing that significantly impacts water quality is the rigor of the permitting process

for proposed projects and activities in the state. Therefore, we also measure a number of indicators that are correlated with an improved permitting process and superior water quality. These are as follows:

Staff caseload levels

FY 2018: 160/FTE

FY 2019: 170/FTE

FY 2020: 200/FTE

Percent of Projects Abandoned Before Permitting Completion

FY 2018: 15%

FY 2019: 17%

FY 2020: 25%

Percent of Projects Abandoned After Permitting Completion

FY 2018: 13%

FY 2019: 14%

FY 2020: 20%

Number of Permits Requested/Year

FY 2018: 1,600

FY 2019: 1,700

FY 2020: 2,000

Water Quality in Water Resources within 10 square miles of development site (out of 10)

FY 2018: 6.3

FY 2019: 6.1

FY 2020: 5.9

As to the water resource pollution levels in small communities, we currently track the following metrics:

- Average Water Quality in Water Resources by Community (link to annual report)

Forward-Looking Evaluation Opportunities: 

For Unconstrained – New, Unconstrained – Expansion, and Constrained – Adjustment Initiatives:

Describe your agency’s plans to evaluate this initiative in the future if your request is approved. Your narrative should include the specific metrics that you plan to track, the methods you plan to use to evaluate the initiative, and the types of data that you will collect. You should explain why and how you’ve arrived at this evaluation plan. You should also quantify what success looks like for this initiative, based on the metrics that you plan to track. If this initiative is ranked as a 3 or lower on

the Rhode Island Evidence Scale, your narrative here should explain how the data that you will collect will enable you to build the base of evidentiary support for this initiative.

For Constrained – Elimination Initiatives: *Simply include the following narrative:* This is a constrained request for elimination of a program; future performance measurement and program evaluation will not be required.

Over the years that OWR has been overseeing wetland development permitting, we have seen an increase in the percent of projects being abandoned and a decrease in water quality wetland resources adjacent to development sites. In response to this data, we attempted to implement a more thorough permitting process; however, due to the lack of staff resources and ever-increasing caseloads, we have been unable to operationalize this change.

Similarly, we have seen regularly decreasing water quality in our small communities in the data that we collect and have correspondingly attempted to more meaningfully engage with these communities around strategic development; however, as above, limited staff resources have hindered our ability to make meaningful organizational change.

Our attempts to operationalize programmatic/organizational changes based on performance data have centered around efforts to strategically develop improved processes. In practice, none of these new processes have gotten past the development stage. However, we review performance data regularly and, given additional staff resources, would certainly use to drive performance improvement.

We plan to continue tracking all metrics for which we currently collect data – staff caseload levels, percent of projects abandoned before permitting completion, percent of projects abandoned before permitting completion, number of permits requested/year, water quality in resources within 10 square miles of development site, and average water quality in water resources by community. We expect to see improvement in all of these metrics, as set out below in the Timeline for Outcomes section.

To track the success of this initiative (the hiring of new FTEs) in specific, we will also begin to track the frequency of water quality testing for each state water resource. This initiative will also be evaluated based upon the water quality data in Pawnee and Eagleton specifically. Since two of the new FTEs will be assigned to Pawnee and Eagleton specifically, we expect to see the greatest improvement in those jurisdictions. And since we've noticed anecdotal evidence that correlates high staff caseloads with low frequency of testing for each water resource, we'll track this metric to determine whether a correlation exists between water quality.

Timeline for Outcomes: 

Describe when, following implementation, you expect to see meaningful change resulting from the initiative (example: completion of a proposed training initiative, return on capital investment, attainment of program targets, etc.)? If you expect long-term savings to result from this initiative, make a note of total savings that you expect on an annual basis and when you expect these to begin.

DEQ has identified specific outcomes that will be tracked for each prong of this proposal. These outcomes are set out below, along with information about when DEM expects to hit particular milestones for each outcome:

Permitting Process Outcomes:

- Staff caseload decrease: As soon as new FTEs are hired, DEM expects annual permit caseloads to decrease from 200/FTE to 120/FTE. This caseload decrease will be operationalized once FTEs can take on their full roles, at the conclusion of new employee orientation (on or before 9/1).
- Permit review timeline reduction: Within six months of hiring (by 1/1/2022), DEQ expects permit review timelines to decrease from 12 weeks on average to 9 weeks on average. Within 18 months from hiring (1/1/2023), DEQ expects to achieve its ultimate goal of 4 weeks or less on average.
- Reduction in percentage of projects abandoned: Within one year of hiring, DEQ expects to see a 5% reduction in the percent of projects abandoned before completion; this will correspond to a \$2,500,000 increase in revenue. DEQ expects the percent of projects abandoned to hold steady at approximately 15% after a 5% reduction in the first year in which FTEs are onboarded.
- Reduction in pollution levels: Within the first six months (by 1/1/2022), DEQ expects water quality to rebound from the 2020 low of 5.9 to 2019 levels of 6.1. In the long term, DEQ expects water quality levels to increase to 7.0 within two years (by 7/1/2023).

Additional Proposal Information


Statutory Implications:

Note whether this initiative will require a budget article in order to be implemented. If an article will be required, identify the impacted statute and include an attachment with proposed new statutory language to accompany this Decision Package form, and a Budget Article Memo, which describes the technical changes to the law as well as the budget and policy implications of those changes. If an article will not be required, simply include the following narrative: This initiative will not require a budget article.

This initiative will not require a budget article.

Interagency Impact:

If this initiative would impact another agency, name the affected agency(ies) and note how the proposal would impact them here. Note whether the other agency has been made aware of this proposal and whether the impact on the other agency will be included in their analysis. If the proposal is likely to have an impact on another agency but that impact is not quantifiable, you should also note that here. If this initiative will not have an interagency impact, simply include the following narrative: This initiative will not impact any other agencies.

Due to the permitting process reforms, we expect to see a small uptick in the revenue collected from wetlands development projects. Within one year, we expect the percentage of projects that are abandoned to decrease from 20% to 15%; based on an average revenue amount of \$50,000 associated with each development project and a total of \$200,000 projects applying for approval and 1,000 receiving approval on an annual basis, the revenue increase is likely to be in the area of \$2,500,000. The Department of Revenue has been made aware of this proposal. 

Federal Funds Impact:

If this initiative will impact federal funds (example: reduce the amount of federal match an agency receives or require the agency to solicit new federal funding), note that here and describe the expected impact. Describe the source of federal funds (ARPA FRF, CAA, etc.) impacted by this initiative. If this initiative will not impact federal funds, simply include the following narrative: This initiative will not impact federal funds.

Utilizing increased Water Quality Management Planning (CFDA: 66.454) grant federal funding from the United State Environmental Protection Agency (EPA), DEM recommends financing half of the cost (\$250,000) of the FTE increase with federal funds.

Information Technology Implications:

If the initiative is expected to impact information technology, include details here about the specific IT impact of the initiative, including if and how you expect it to impact the DoIT ISF. If this initiative will not impact information technology, simply include the following narrative: This initiative will not impact information technology.

This initiative will not impact information technology.

Additional Details:

If you would like to include any other information about this proposal that does not fit into one of the above-detailed categories, please feel free to use this space to add that information to your submission.