DEQ Working to Improve Organizational Structure and Permit Processes, But Targeted Adjustments and a Permit Performance Management System Are Still Needed

A presentation to the Joint Legislative Program Evaluation Oversight Committee

November 20, 2019

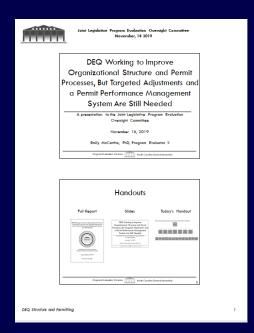
Emily McCartha, PhD, Program Evaluator II

Handouts

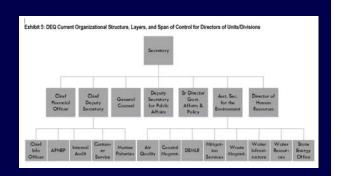
Full Report



Slides



Today's Handout



Our Charge

- Directive: 2019–20 Work Plan
- Objective: Examine DEQ's organizational structure and processing of complex agricultural and industrial permits
- Team
 - Emily McCartha, Evaluation Lead
 - Brent Lucas, Principal Program Evaluator
 - Natalie Garrett, Program Evaluator

Overview: Findings

 Five of DEQ's 20 organizational units demonstrated a higher likelihood for structural inefficiencies than the other 15 units, with the Division of Marine Fisheries presenting the highest likelihood of containing structural issues

Overview: Findings

- Decentralization of permit processing enables units to meet varied permit requirements, but efficiency and effectiveness concerns may emerge absent a central performance management system
- DEQ's Permitting Transformation Project (PTP)
 offers a means of remedying the lack of a
 performance management system to address
 permit processing but needs adjustments

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Overview: Recommendations

- Direct DEQ to study the narrow spans of five organizational units identified as potentially problematic
- Direct DEQ to develop and report a formal business plan to demonstrate ROI for Permitting Transformation Project
- 3. Direct DEQ to develop a central performance management plan for permit processing within Permitting Transformation Project

Background

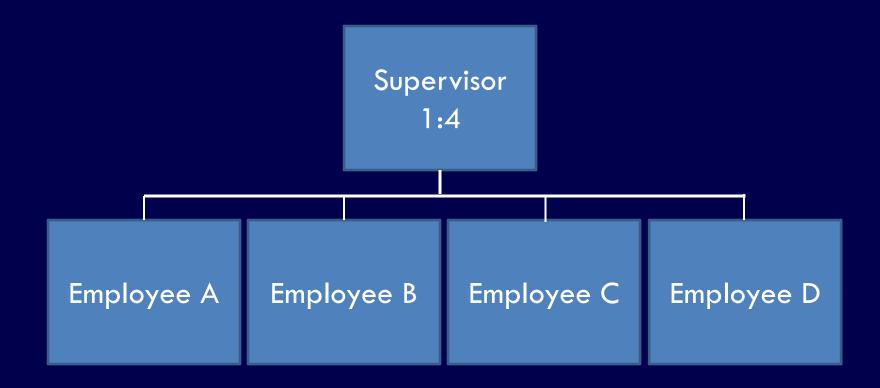
Organizational Structure

Follow-up to a 2016 PED Study

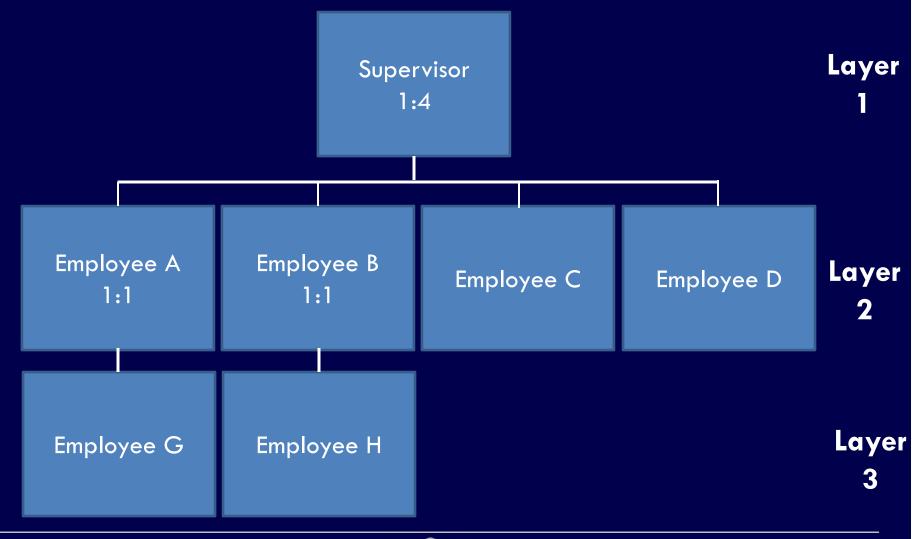
 Spans of Control – Ratio that reflects number of employees each supervisor oversees

 Organizational Layers – Number of levels in an organization's hierarchy from its highest to lowest position

Span of Control



Organizational Layers



DEQ Structure

- Earliest form of DEQ established in 1971
- Most recent notable changes occurred in 2015
 - Several functions and activities moved outside of DEQ; subsequent budget adjustment
- Current Mission
 - "Provide science-based environmental stewardship for the health and prosperity of all North Carolinians"

DEQ Structure

- Undertakes its mission with 1,778 FTE
 - (1,605 permanent, 173 temporary)
- 20 organizational units
- Main activities: Administer regulatory programs (permits), advance energy strategies, offer technical assistance, provide environmental education

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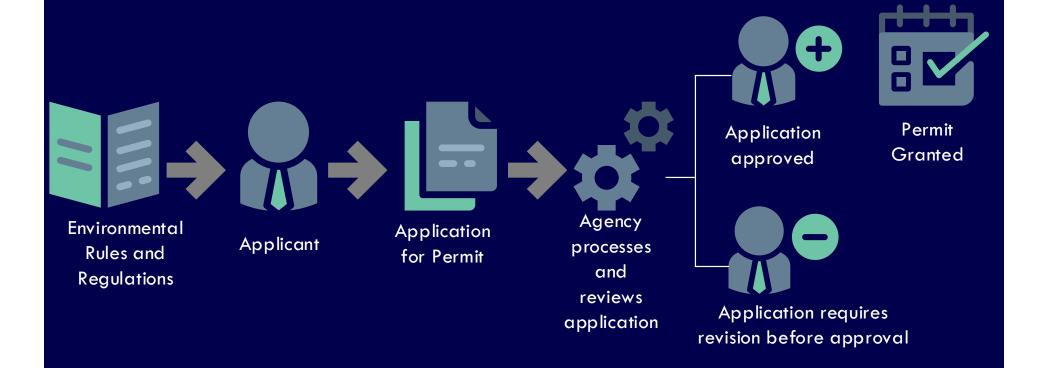
Environmental Permitting

DEQ processes over 200 types of permits

 Protection of specific resources from specific activities and sometimes in specific places

 Permit processing can be complex and suffer from inefficiencies

Permit Processing



Complex Industrial and/or Agricultural Permits

- 22 identified permits
 - Require involvement of a licensed professional
 - Resist creation of a general framework
 - Require sophisticated technology or equipment
 - Exist only for complex situations

Findings

Finding 1

DEQ's average span of control and total organizational layers in 2019 remain similar to 2016 levels

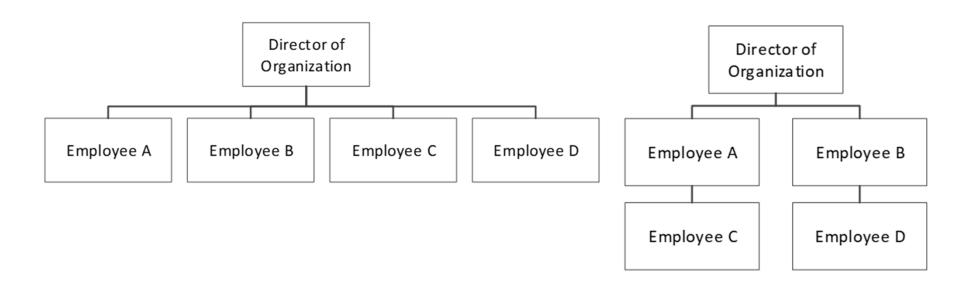
PED's 2016 Study

- Used a 1996 OSBM study for benchmarks
 - Recommended span of control of 1:8
 - Recommended no more than 7 layers
- This evaluation provides a follow-up
 - Found them conservative relative to other states and academic research
 - Uses the same measures and data analysis approach (BEACON)

Spans and Layers are Connected

Broad Spans (1:4 or more)

Narrow Spans (1:3 or less)



2016 to 2019 Comparison

Structural Measure	2016	2019
Average Span of Control	1:5.5	1:5.6
Percentage Broad Spans 1:8+	24%	27%
Staff Beyond 7 th Layer	35%	15%
Percentage Narrow Spans 1:3	30%	32%
Number of Layers	10	11

Finding 2

Five of DEQ's organizational units present a higher likelihood of structural inefficiencies, with Marine Fisheries being the greatest outlier

Assessment of Units

• 20 units

• Divided into 3 groups by size

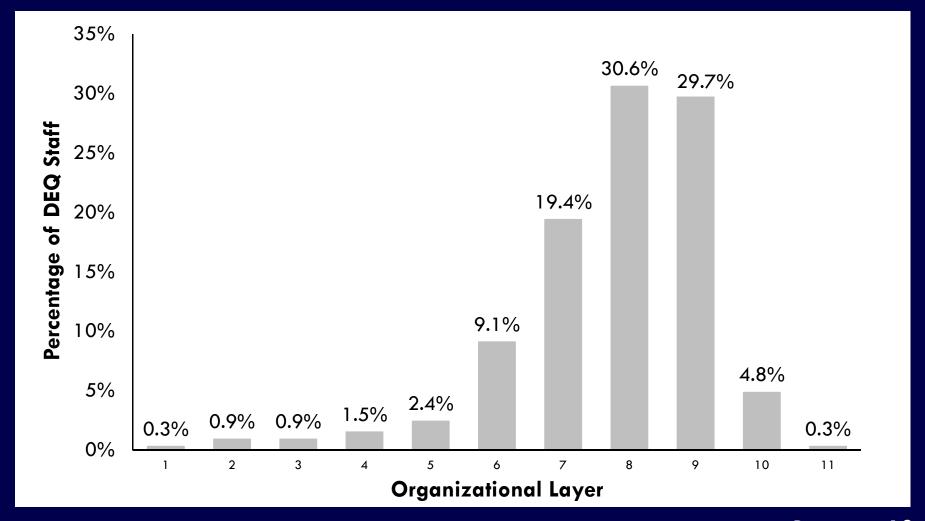
- Identified units
 - Narrow spans accounted for 50% or more of all spans, or
 - Unit's average span of control was 3 or lower

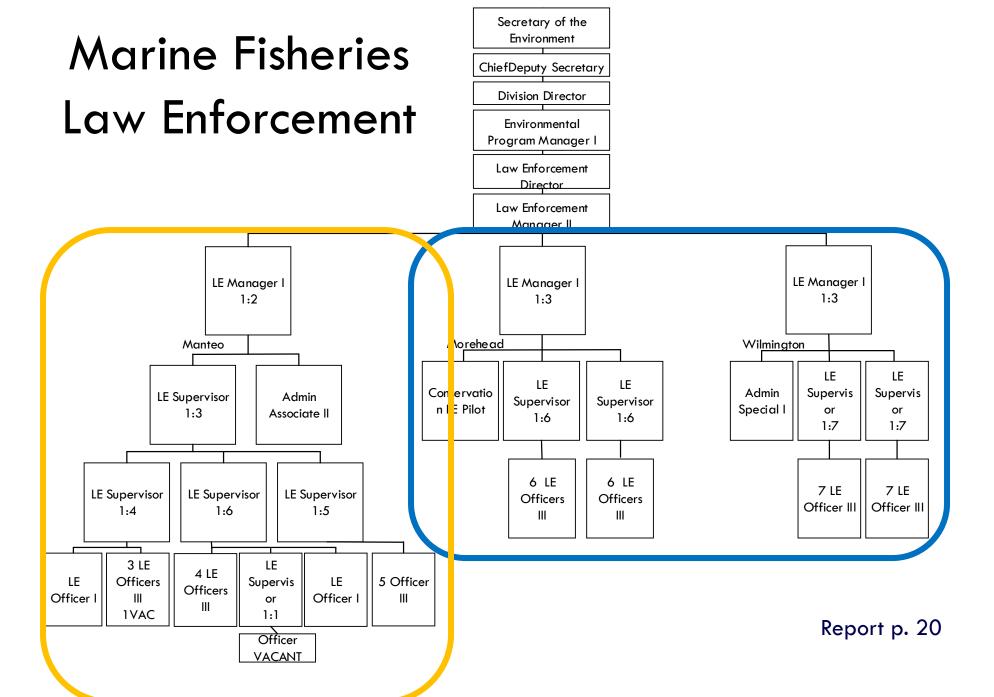
5 Potentially Problematic Units

DEQ Unit	Staff Size	Average Span of Control	% of Spans that are Narrow	Total Layers
Public Affairs	23	4.4	60	5
State Energy Office	26	8.5	0	5
Mitigation Services	30	2.6	73	6
HR	33	2.9	73	6
CFO	36	2.9	58	6
Water Infrastructure	47	4.8	38	6
Coastal Management	53	4.7	36	6
Env. Assist. & Customer Service	65	6.4	20	5
DEMLR	126	6	24	7
Air Quality	218	7.5	7	7
Waste Management	284	6.3	7	8
Marine Fisheries	324	3.8	53	11
Water Resources	466	8.2	14	9



Marine Fisheries





Finding 3

The structure of permit processing varies due to federal and state law, administrative rule, and policies that specify requirements for permit processes

Laws, Policies, and Rules Guide DEQ's Activities

- What resource is to be protected and how
- Timeliness requirements for processing permits
- How long permits are valid
- Related costs for permits
- Which entities must participate in the permit approval process
- Oversight requirements, including reporting

Decentralized Permit Processing

- The number of entities involved, DEQ staff involved, and staff that provide approval vary
- On average per complex permit
 - 4 DEQ staff members involved in permit processing
 - 2 DEQ staff members provide permit approval
 - 2 entities (including DEQ) are involved in permit processing

Finding 4

Decentralization of permit processing enables DEQ units to meet varied requirements, but efficiency and effectiveness issues may emerge absent a central permit performance management system

Best Practices

3 Domains

- Customer service
- Use of technology
- Internal management practices

Please refer to your handout with the

Complex Permitting Best Practice Table

Finding 5

DEQ's Permitting Transformation Project offers an opportunity to build a permitting performance management system but needs adjustments

Permitting Transformation Project

- Launched in 2017 by the Secretary of DEQ
- Paid for by DEQ
- Contains several goals but prioritized automation of the permitting process system and management of permitting data
- Incorporates Six Sigma LEAN practices
- Already assessing and adjusting permitting processes with LEAN

PTP Still Needs

 Permit performance management system with goals, measures, data collection and documentation system to measure processes over time

 Business plan with ROI demonstrating cost savings and benefits over time

Recommendations

Recommendation 1

Direct DEQ to study narrow spans of control in the identified five units and justify their presence or propose options for adjusting them

Recommendation 2

In relation to PTP, direct DEQ to

- Develop a report/business plan to demonstrate ROI over time
- 2) Develop a permit performance management system within PTP including the accompanying data system to collect and monitor data

Findings Summary

- 1. Agency-wide span of control and organizational layers in 2019 remain similar to 2016 levels
- 2. Five of DEQ's 20 organizational units contain higher levels of potential structural issues
- 3. Permit processes vary according to law
- 4. Permit process variation is not inherently problematic, but the lack of a permit performance management system invites concerns
- 5. PTP offers a way to remedy the lack of a performance management system but needs adjustments

Recommendations Summary

- Direct DEQ to study and report on the five organizational units PED identified as containing potentially problematic issues
- 2. Direct DEQ to develop a business plan that demonstrates costs and benefits of PTP
- 3. Direct DEQ to develop a permit performance management system within PTP

Summary: Response

The Department of Environment Quality submitted a response that reflected general agreement with our findings

Report available online at www.ncleg.net/PED/Reports/reports.html

