PTP Update - ESI
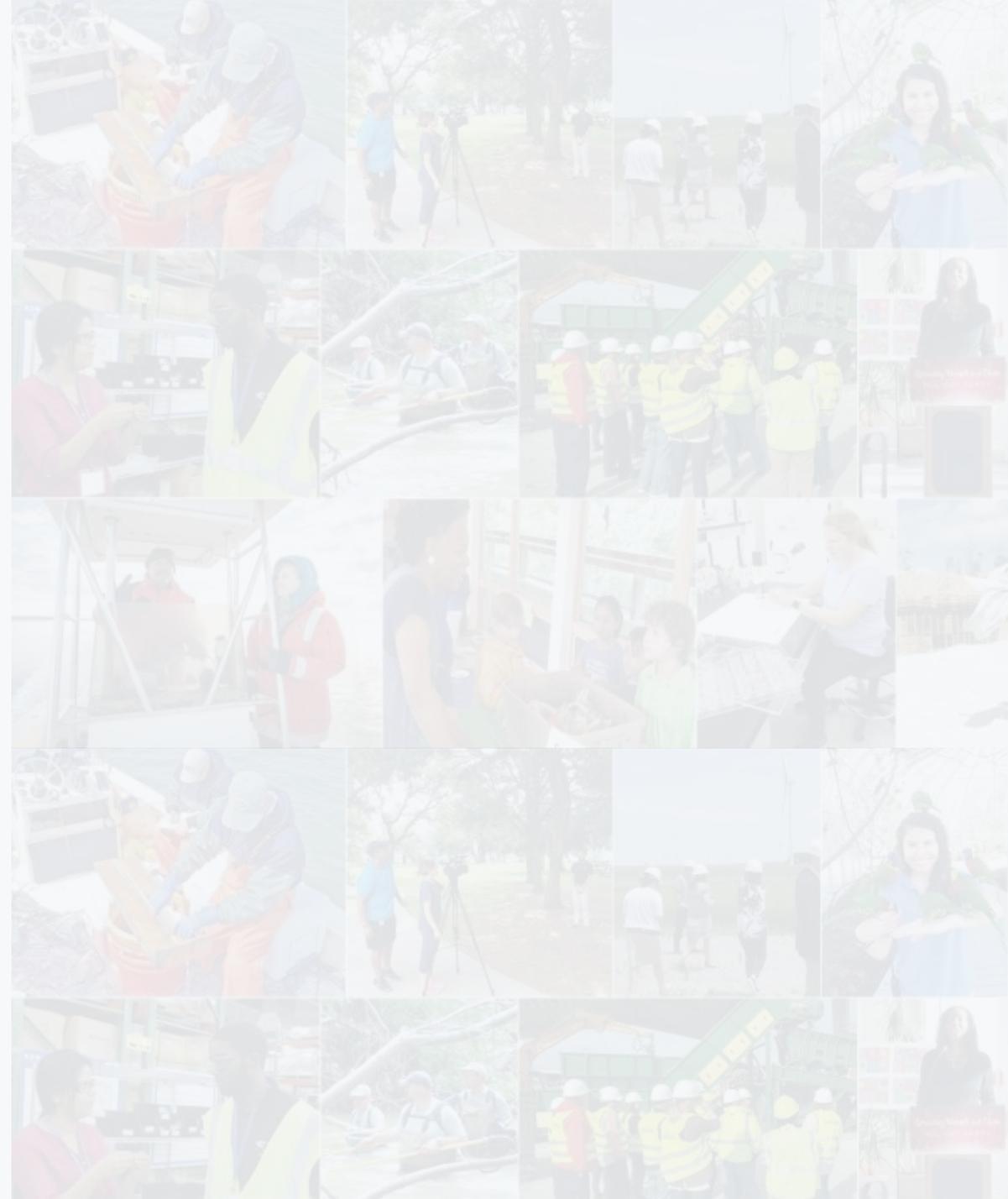
NORTH CAROLINA
Environmental Quality

October 2022

PTP Overview

Streamline Permitting Process

Ensure a consistent, transparent permitting process.

Modernize Permitting System Online

Web-based solutions for applying, tracking and paying for applications.

Create Publicly Accessible Data Dashboards

Develop an interactive, web-based publicly accessible system for data, including permits, records, compliance issues and enforcement actions.

PTP scope encompasses all permitting activities from application, payment/fees, inspection, compliance to enforcement for regulatory divisions (excluding DMF).

Case Study - Coastal Management

About the Division

The Division of Coastal Management works to protect, conserve and manage North Carolina's coastal resources through an integrated program of planning, permitting, education and research.

DCM is responsible for several programs, including:

- Permitting and enforcement
- CAMA land-use planning
- Public beach and waterfront access
- North Carolina Coastal Reserves
- Grants for marine sewage pumpout.

The division also collects and analyzes data for erosion rates, wetlands conservation and restoration, and to assess the impacts of coastal development.

Case Study - Coastal Management

Situation

Permits
CAMA Major
CAMA General
Transfers, Renewals and Modifications
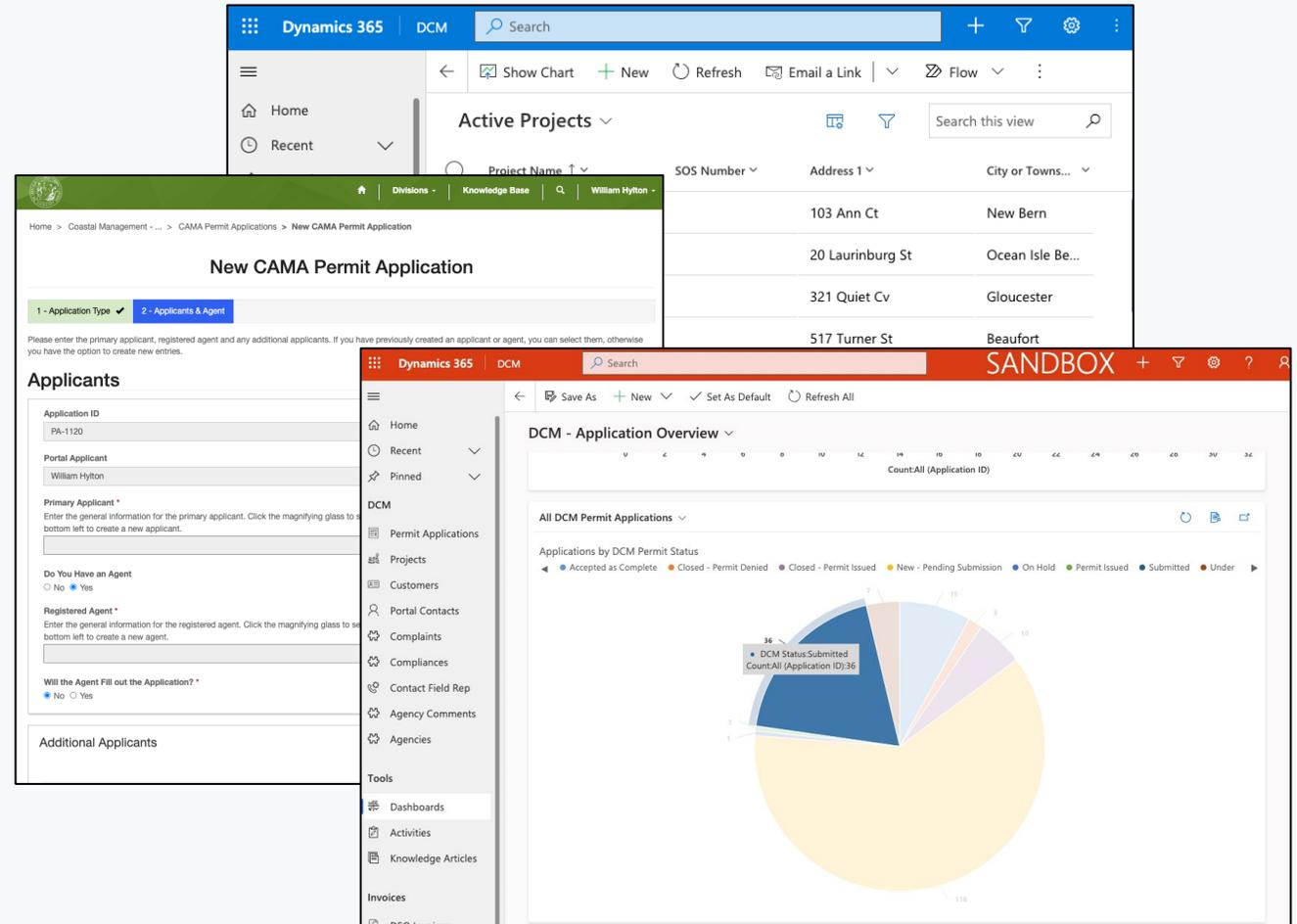Compliance & Enforcement

Issues

- Resource-intensive, paper-based system since the 1970s. Files at risk of organizational errors, floods, etc.

- Processes evolved in a non-digital manner for 40+ years.

- Database created in the 1990s.

- Until 2019, applications mailed in and circulated to review agencies via mail.

- No dedicated IT staff. Expertise required to extract data.

- Physical checks for payments.

Case Study - Coastal Management
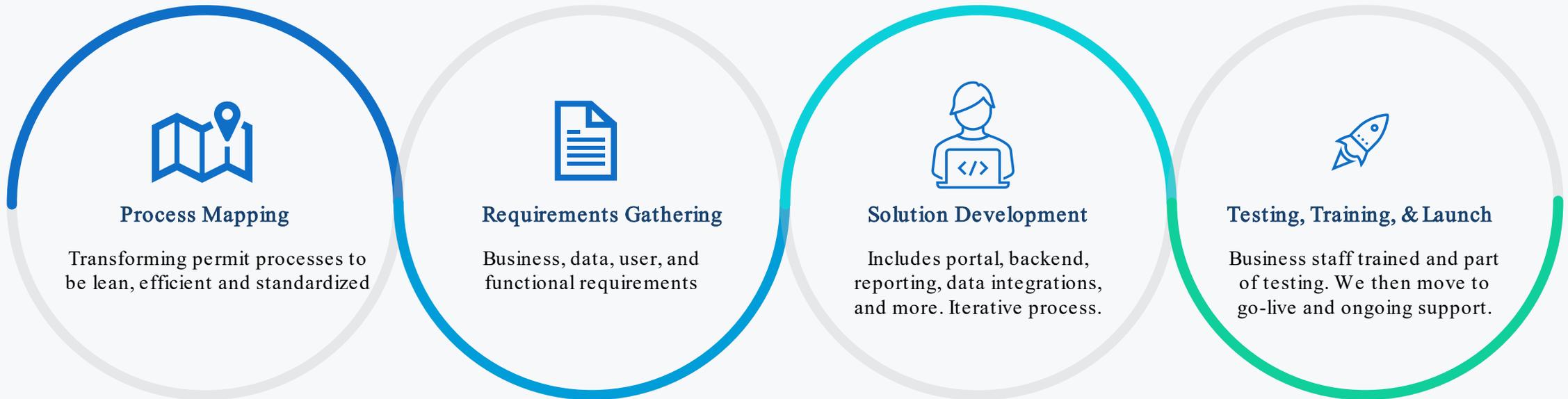
Goals and Objectives

- Increase efficiencies for staff and public.

- Completely reimagine and map processes from start to finish for a streamlined digital experience.

- Enable staff to access data outside of the office.

- Mitigate risk of physical file loss.

- Simplified electronic payments.

- Deploy secure, modern, cloud-based technology stack (MS Dynamics, Azure cloud).

- Solution can evolve based on user feedback, staff needs, and changing tech landscape.

- "Future-proofed" (must be viable years from now).
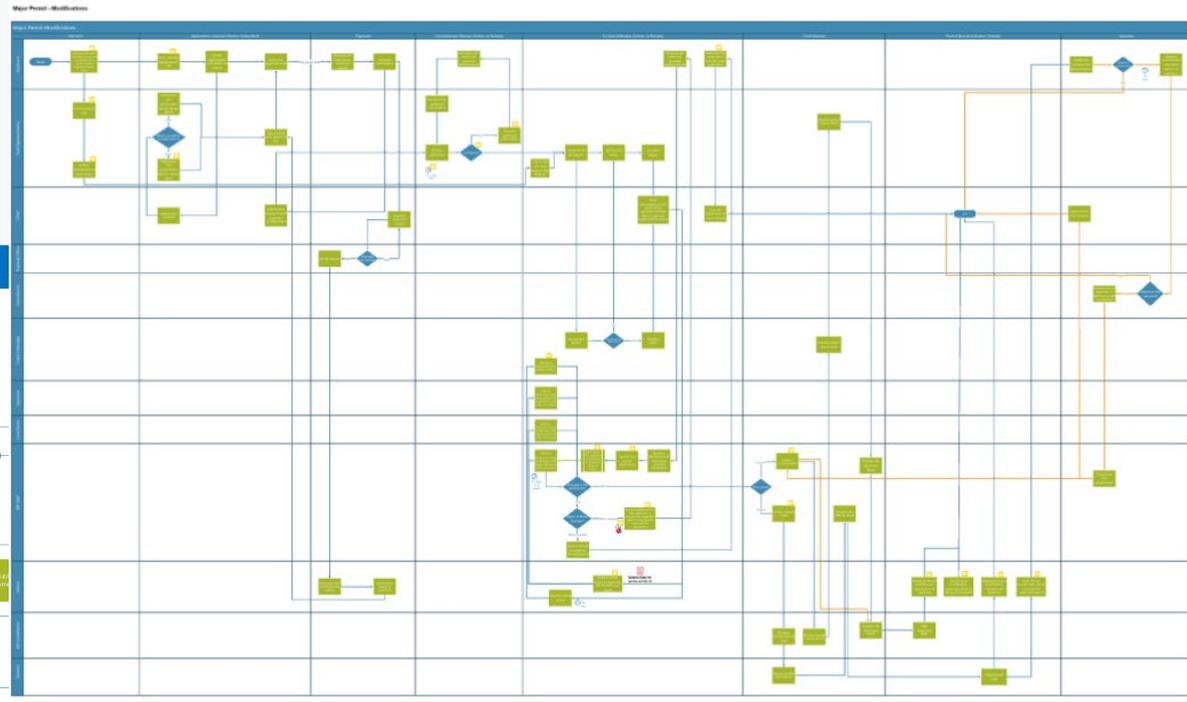
Case Study - Coastal Management

Solution Development Journey

Process Mapping

Transforming permit processes to be lean, efficient and standardized

Requirements Gathering

Business, data, user, and functional requirements

Solution Development

Includes portal, backend, reporting, data integrations, and more. Iterative process.

Testing, Training, & Launch

Business staff trained and part of testing. We then move to go-live and ongoing support.
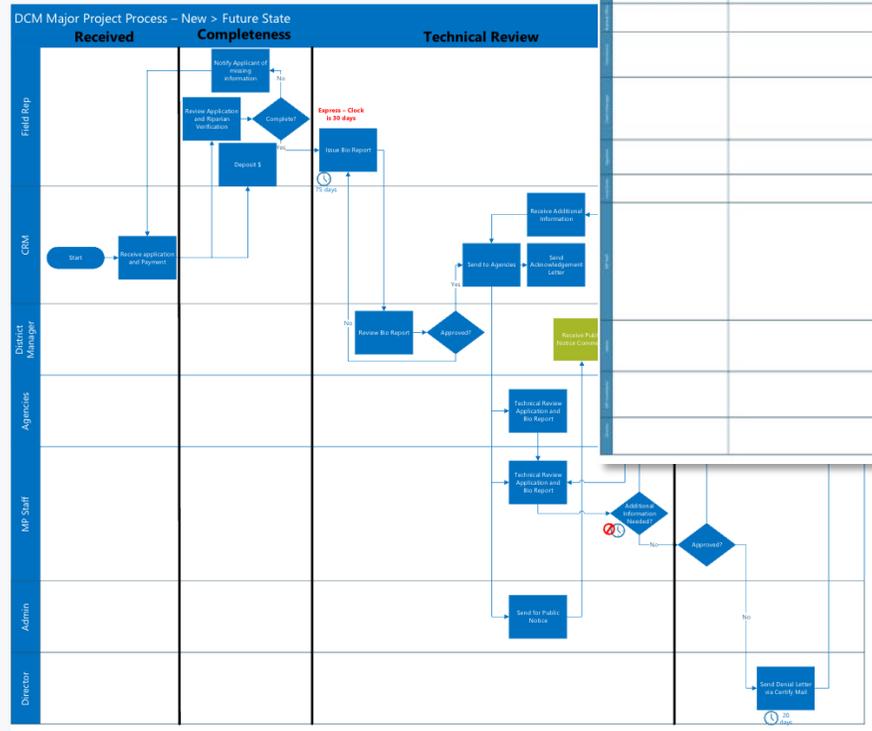
Legislative funding enabled PTP team to hire Project Managers, Solution Developers, Business Analysts, and Data Architects to move solutions through the transformation journey.

Case Study - Coastal Management

Process Mapping

Case Study - Coastal Management

A lot of collaboration!

Case Study - Coastal Management

New Solution ~ Soft Launch

- End-to-end streamlined, digital experience

- Electronic payments via PayPoint

- Customized user dashboards and views

- Reporting

- External agencies (i.e. EPA) can add comments online

- Field Reps can use the applications on their tablets when out in the field doing inspections.

- Increased efficiencies and usability

- Mitigated risk of physical file loss.

- No dependency on legacy IT/database expertise.

- Solid, secure, cloud infrastructure
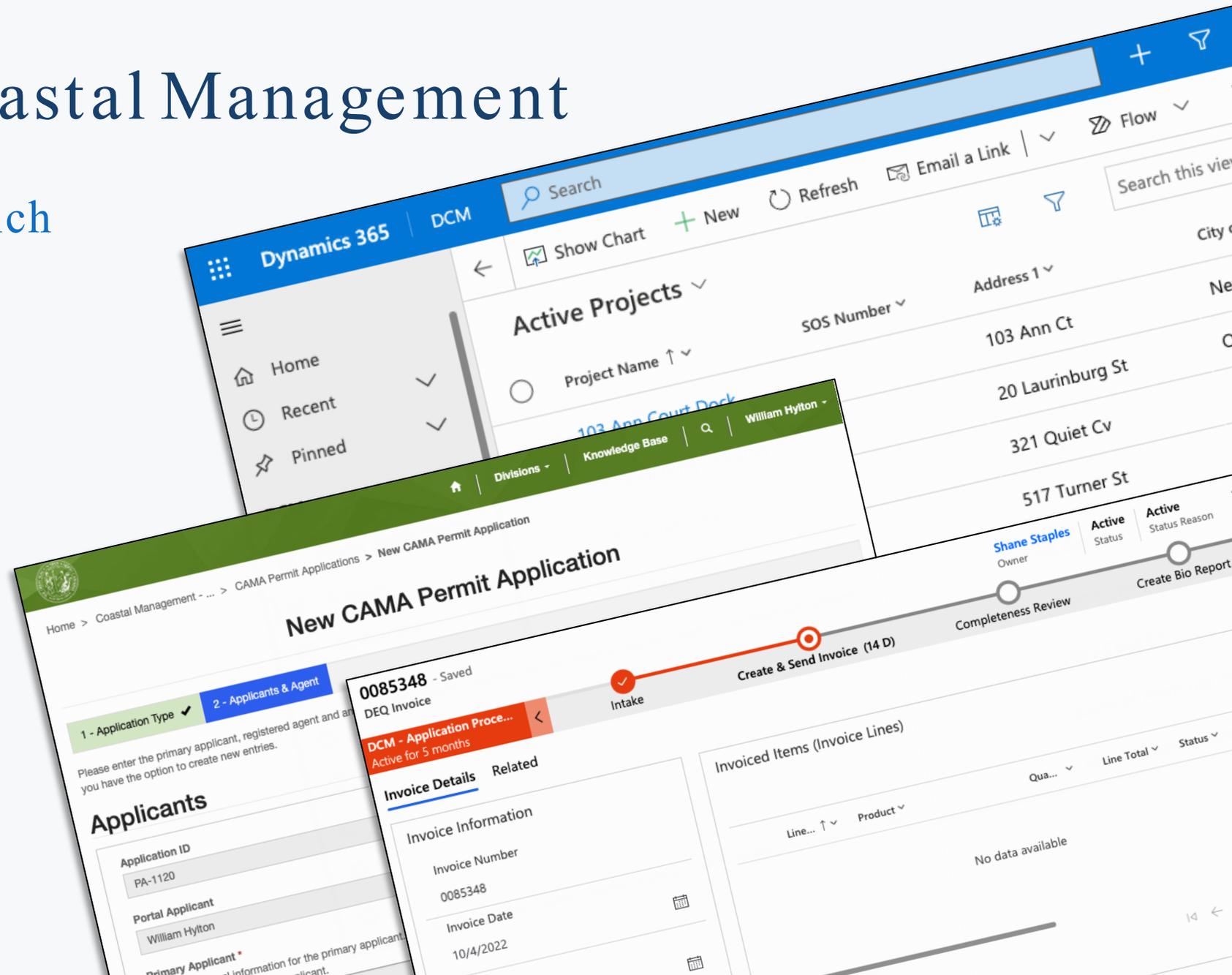
" We've been extremely impressed and happy with the progress with what we've achieved with staff and IT...”

- Gregg Bodnar

Currently In-Flight

Division	Program	Phase
DCM	Major & General	Soft Launch & Support
DEMLR	Erosion Sediment & Control	Development
DWM	Brownfields	Requirements
DEMLR	Post-Construction Stormwater	Requirements
DWR	General NPDES Wastewater	Process Mapping
DEMLR	NPDES Stormwater	Process Mapping
DAQ	Title V Permits for Air Curtain Incinerators	Process Mapping
DEMLR	Mining	Process Mapping

Technology

PTP Elements

Enterprise Data Model
Common data elements facilitate reporting and provide agency-wide business insights.

Modern Tech Stack
Modern, cloud-based infrastructure, MS Power Platform, APIs, integrations, and tools.

Electronic Payments
Efficient, secure payment and invoicing system.

Permitting Transformation Program

Process improvement
Leaned, intuitive, standardized processes.

User Experience
User-focused approach for the public and DEQ staff.

Communication & Transparency
Consistent and transparent communications to all stakeholders.

" Strive for continuous improvement, instead of perfection. "

- Kim Collins