

SESSION 3D · EXTENDING THE LIFE OF YOUR PORT ASSETS

ASCE COPRI's Waterfront Facilities Inspection Committee

Knowing Your Asset's True Condition
Efficiently. Effectively. Profitably.

Sean Chapman, PE

Senior Vice President, Marine Solutions Inc.
Chair, ASCE COPRI Waterfront Facility Inspection Committee

Association of Pacific Ports | 112th Annual Conference



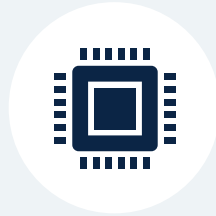
EXTENDING THE LIFE OF YOUR PORT ASSETS

State of Practice Has to Keep Pace



Asset Management

Practices are advancing



Technology

Inspection tools are
advancing



Standards & Training

Have to advance just as fast

The payoff: done right, it's how you spend inspection and maintenance dollars more wisely and protect revenue-generating assets.

ASCE COPRI WATERFRONT INSPECTION COMMITTEE

Who We Are

Industry Experts

Port owners, engineers, inspectors, and consultants nationwide

Part of COPRI

Sits within ASCE COPRI's Ports and Harbors Committee

Our mission

Advance the state of practice for waterfront inspection, nationally



**COASTS, OCEANS,
PORTS & RIVERS
INSTITUTE**



THE STANDARD

MOP 130

Manual of Practice for Waterfront Facility Inspection and Assessment

Inspection Types & Intervals

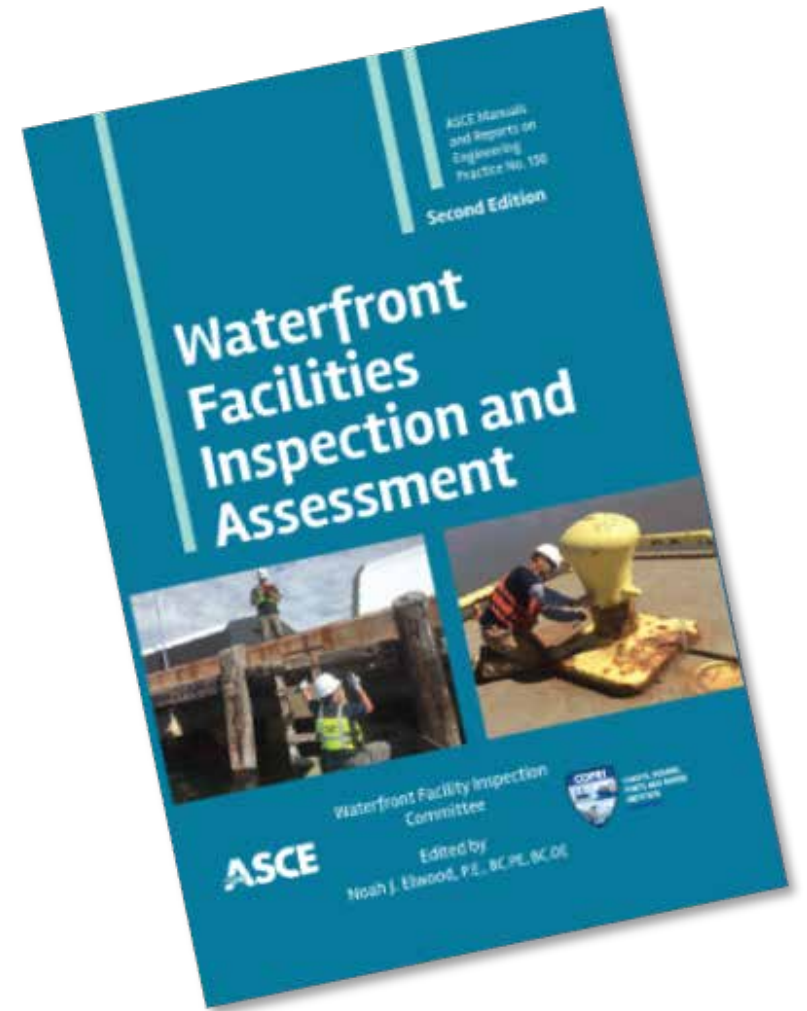
Standardized frequency and scope across facility types

Damage Rating Tables

Element-by-element ratings

Condition Assessment Rating

Overall condition rating definitions



The short version: *it's what tells an inspector exactly what to look for, where to look, and what it means when they find it.*

MOP 130 & YOUR BOTTOM LINE

Following the Standard Reduces Risk and Protects Revenue

Fewer Interruptions

Lower Liability

True Comparability

***Specifying and following MOP 130 isn't a compliance checkbox...
it's a bottom-line decision.***

IN DEVELOPMENT NOW

MOP 130, 3rd Edition

1

Current Edition

2

In Development

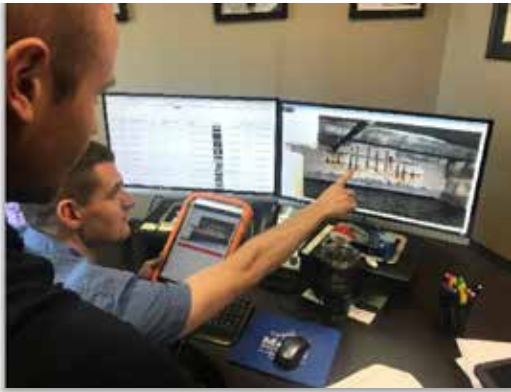
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Your Input



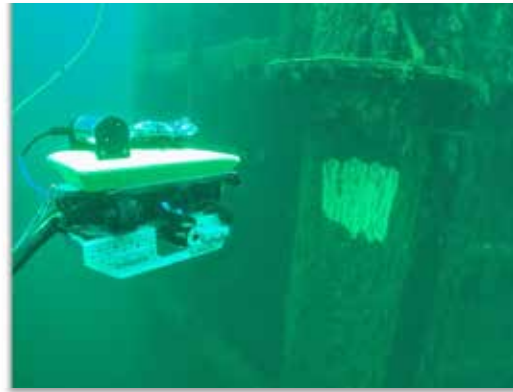
THE WFI CERTIFICATE PROGRAM

Technology in the Hands of the Unqualified Doesn't Work



In-Person

=



Unmanned Platform

=



Digital Twin

*Whatever the platform, **a trained inspector who knows how to apply the standard** gets faster, better, more reliable answers.*

WHAT THE COURSE ACTUALLY COVERS

Program Curriculum



**Introduction to
the Waterfront**



**Types of
Inspections**



**Inspection
Basics**



**Inspection of
Components**



**Condition
Assessment
Ratings**



**Techniques &
Technologies**

Program objectives: increase use of ASCE standards, improve inspection quality, promote consistent practices, share best practices, and expand the pool of qualified inspectors.

WFI CERTIFICATE PROGRAM

3–4 Day Course, Two Paths to Access It



Open Enrollment

- Public sessions offered twice a year at ASCE offices.
- Advertised through ASCE when enrollment goes live.



Host It Yourself

- Ports and agencies can host the course directly.
- Closed for your own staff or opened with public seats.

Either way: build in-house inspection capacity and start specifying certified inspectors in your RFPs and consulting contracts.

WHERE INSPECTION IS HEADED

The Technology Landscape



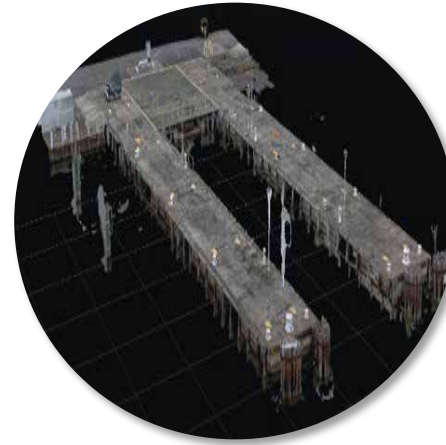
**UAV / Drone
Inspection**



**Mobile LiDAR
& SLAM**



**3D Sonar,
ROV & USV**



**Reality
Capture &
Digital Twins**



**AI-Assisted
Defect
Detection**

THE COMMITTEE'S ROLE

Guidance, Not Endorsement

Appropriate Use & Readiness

What technology fits which use case, and how mature it actually is

Maps Back to MOP 130

Data stays comparable and standardized — engineering judgment remains the governing authority

Engineer Judgment Stays in the Loop

AI-assisted, not AI-replaced — a licensed engineer signs off on the final assessment

WHAT WE PROVIDE

Standard + Qualified People + Validated Technology



MOP 130

What to look for, where,
and what it means

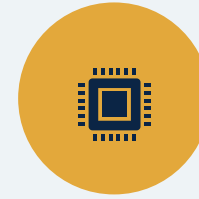
+



WFI Certificate Program

People who apply it
correctly and efficiently

+



Technology Guidance

New tools that improve
results without breaking
consistency

= The foundation underneath everything else on today's panel

ACCESS

Contact & Resources

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