Microsoft

ECOS STEP Meeting

How technology is changing environmental protection


PAST
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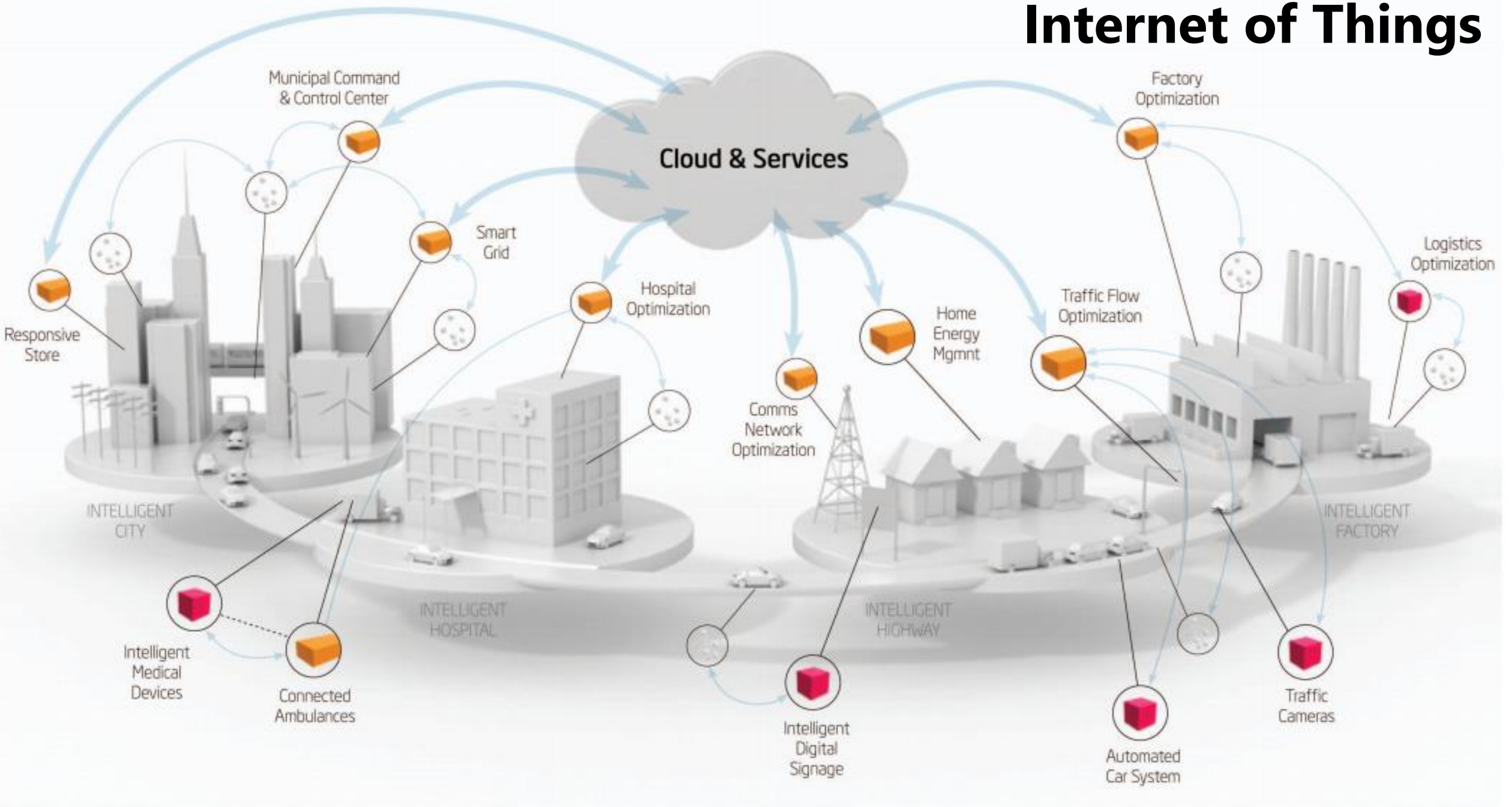
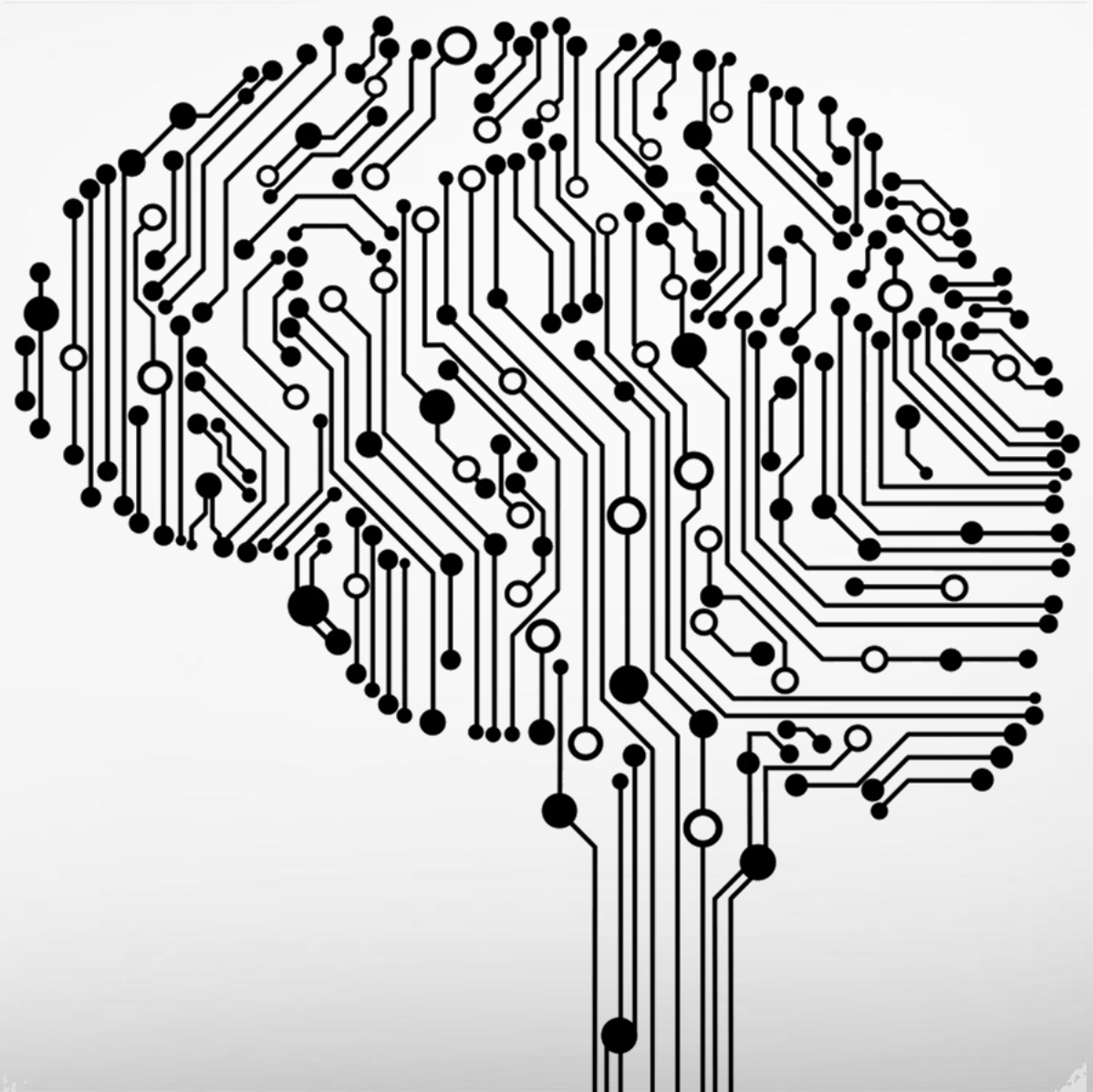
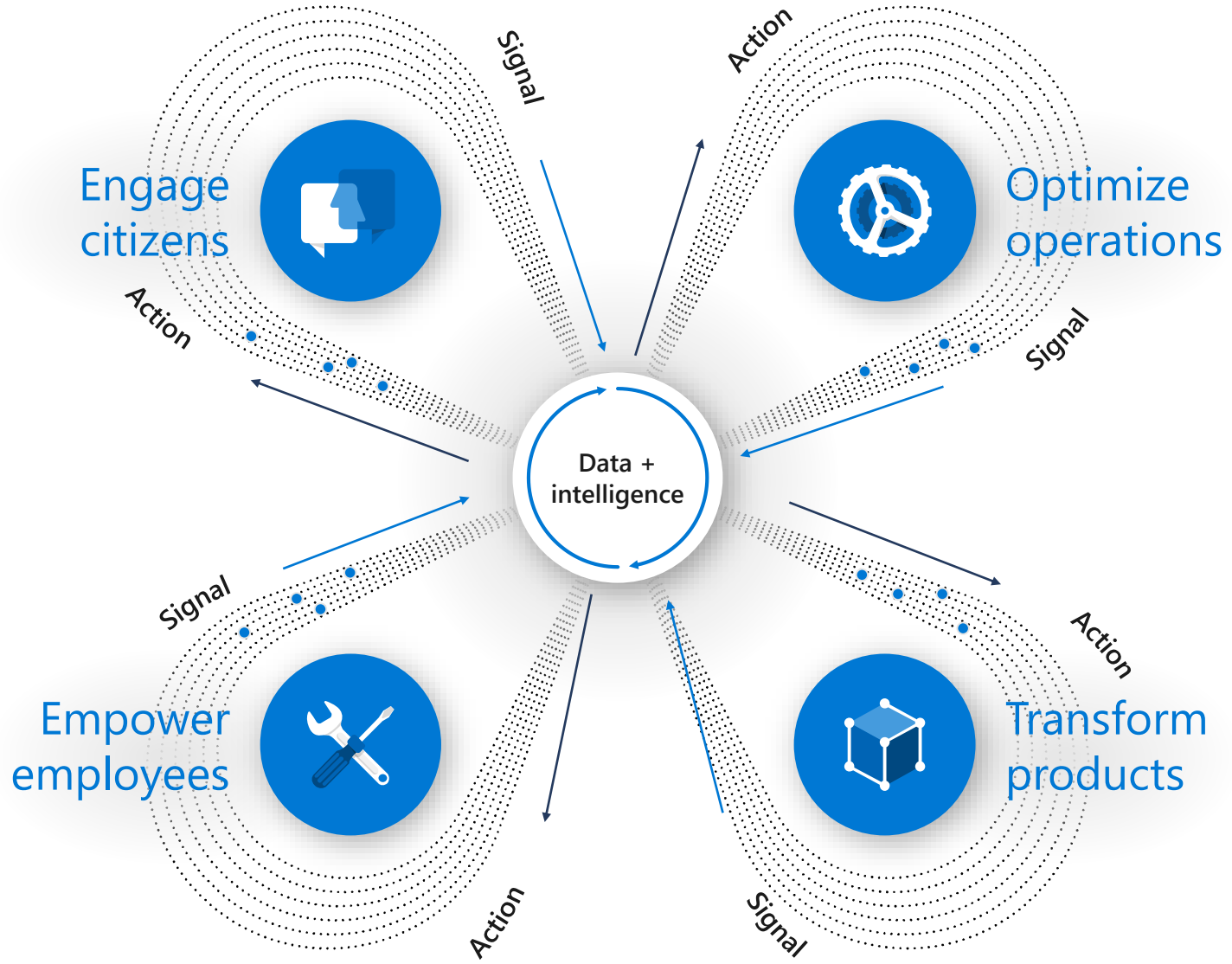
Internet of Things



Artificial Intelligence





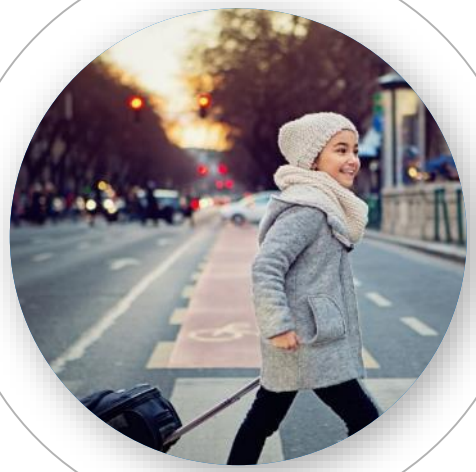
80 Billion

Connected “things” by 2025 generating 180ZB of data

Computers understanding the world

Perception

Vision



Speech

Cognition

Language

Knowledge

Permitting

Inspection


10

Compliance

Smart technology to *continuously improve stormwater management* by delivering real-time visibility, adaptively controlling assets and support smart cities.

Stormwater challenges

Flooding

More frequent flooding events

Hurricane Harvey caused over **$125Bn in damage**

Combined Sewer Overflows

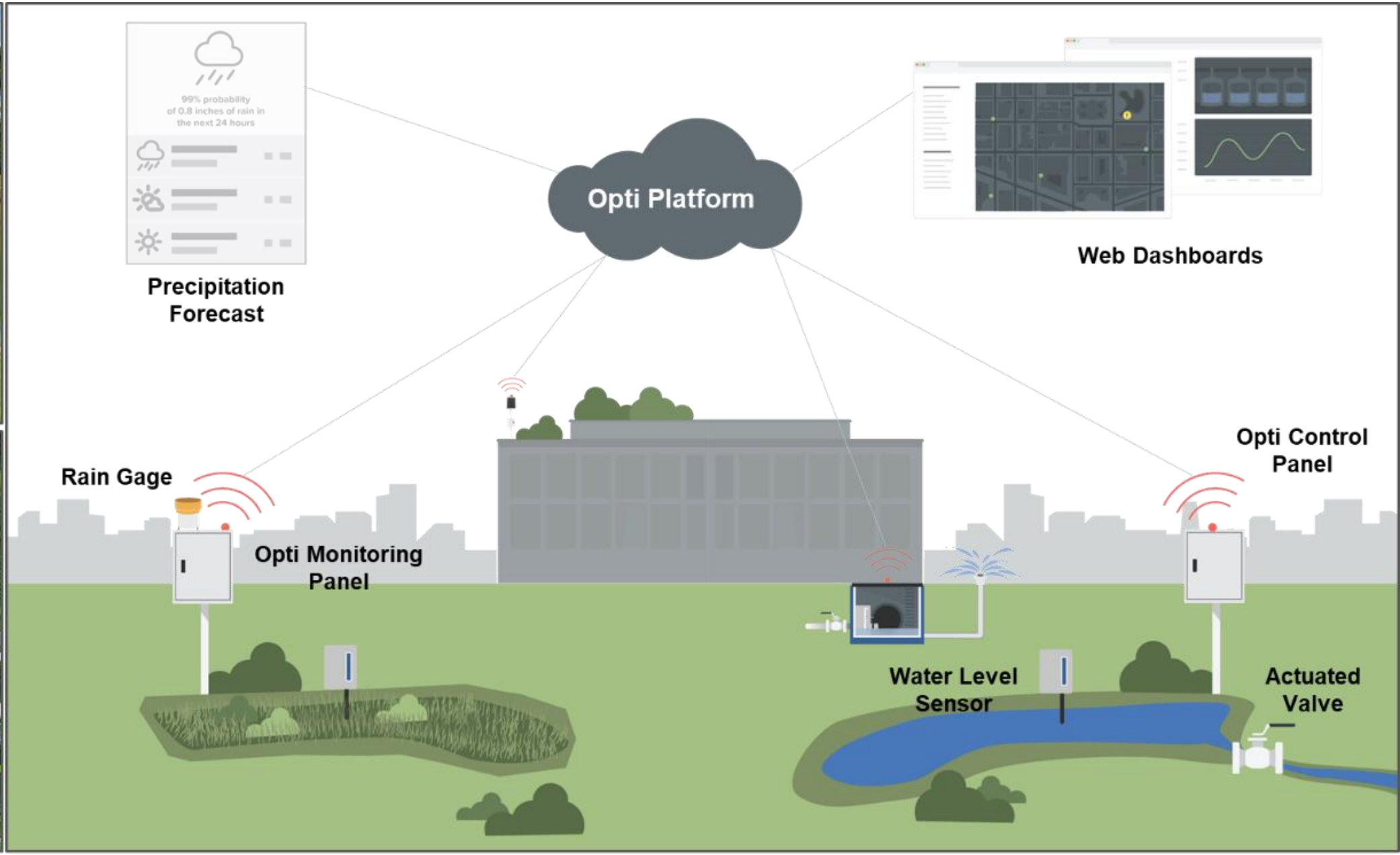
770 combined sewer communities in the US

$50.6Bn to capture 85% of combined sewer overflows

Water Quality

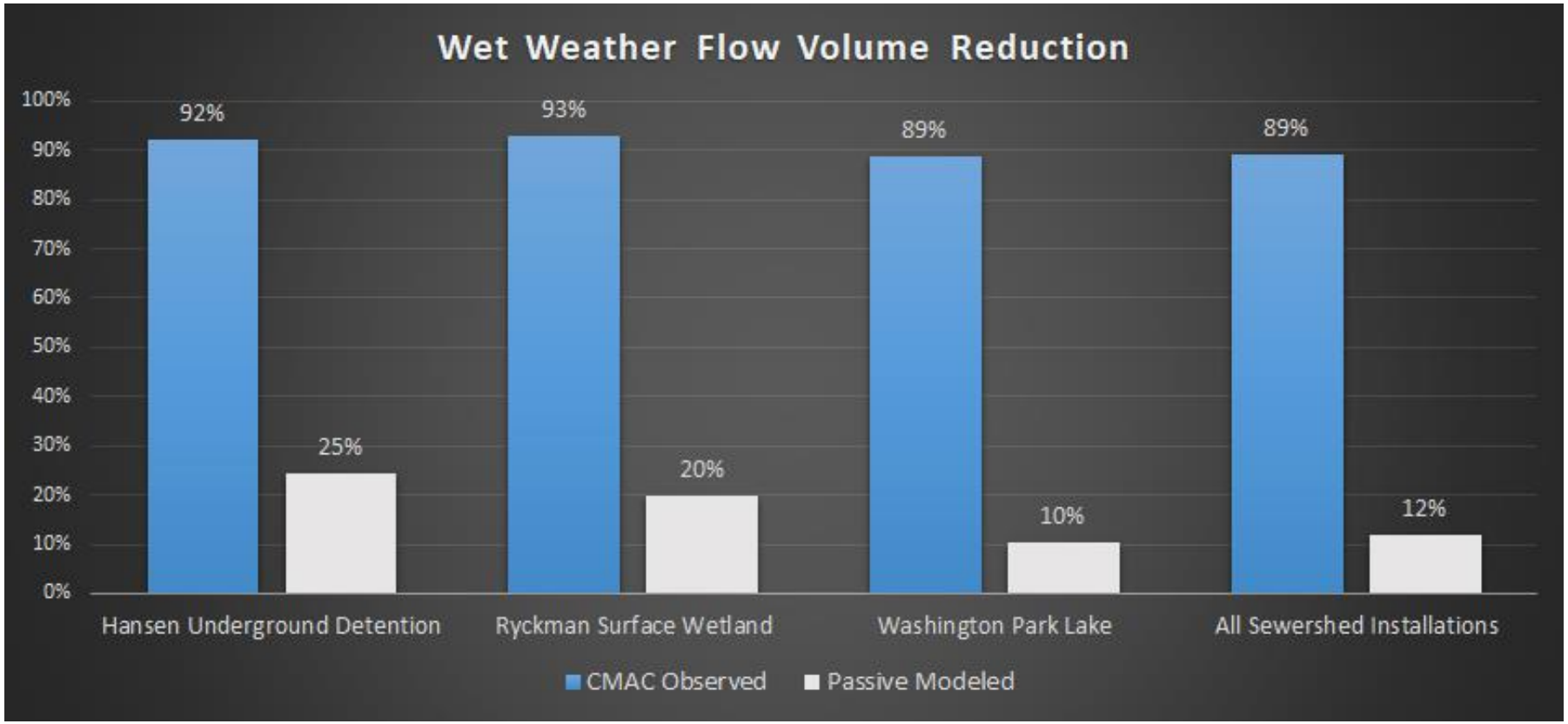
7,450 Municipal Separate Storm Sewer System (MS4) communities in the US

Chesapeake Bay Clean-up to exceed **$28Bn** plus **$2.7Bn/yr in O&M**



Opti outperforms passive infrastructure

A **6.5% additional capital investment** has led to a **6.5x improvement in incremental wet weather performance** as compared to passive control.



Dataset taken from March 1, 2018 to March 1, 2019 for all sites above

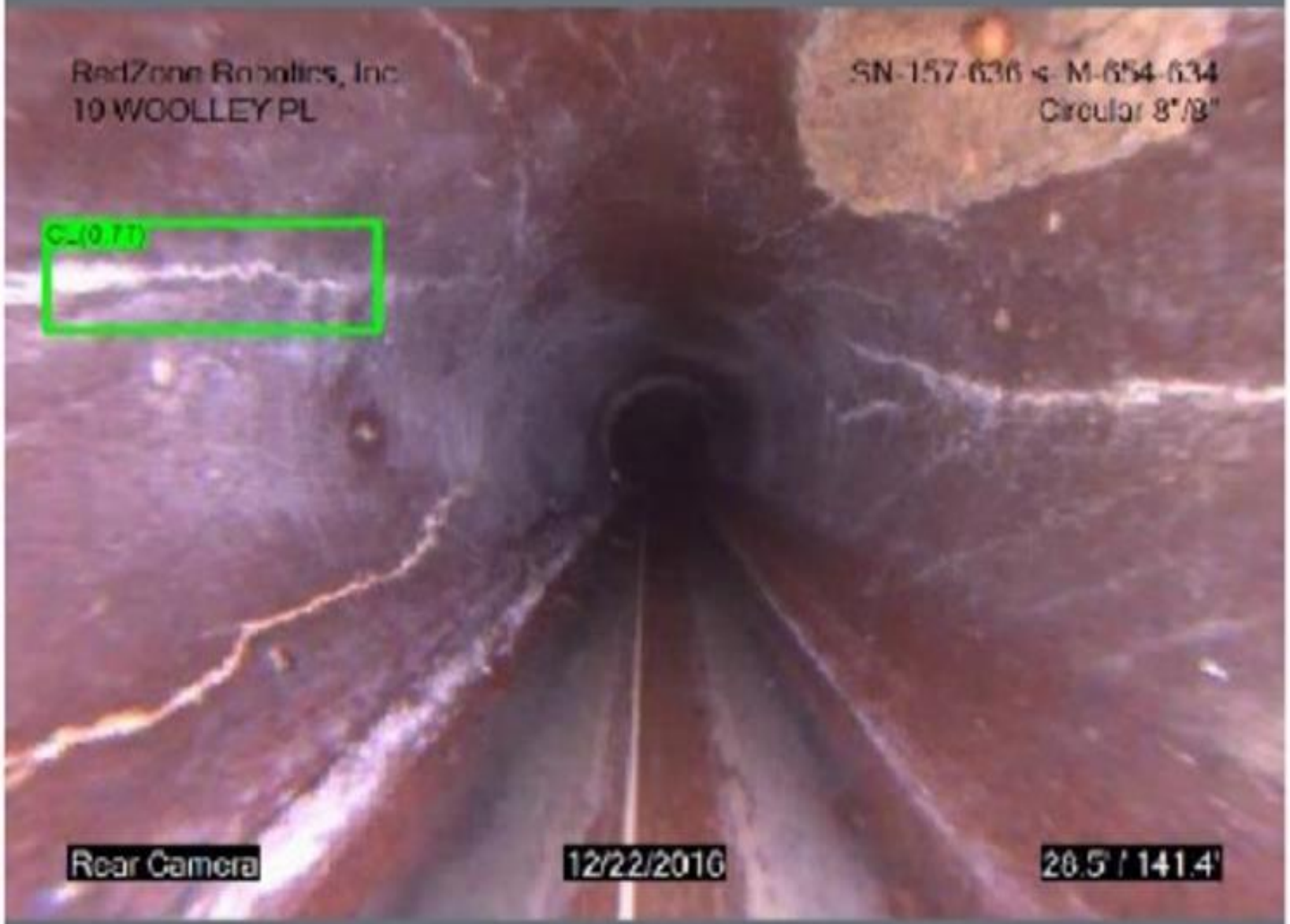
Recipient of 2019 Platinum Award

ACEC New York
American Council of Engineering Companies of New York

2019 Winner in Smart Water Category

IDC Smart City
NORTH AMERICA AWARDS

DC Water



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O&M Grade: 0
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Clock To:
1st Value:
2nd Value:
Value Percent:
Continuous Index:
Within 8" of Joint:
Remark :

Analyze Video | Review Report

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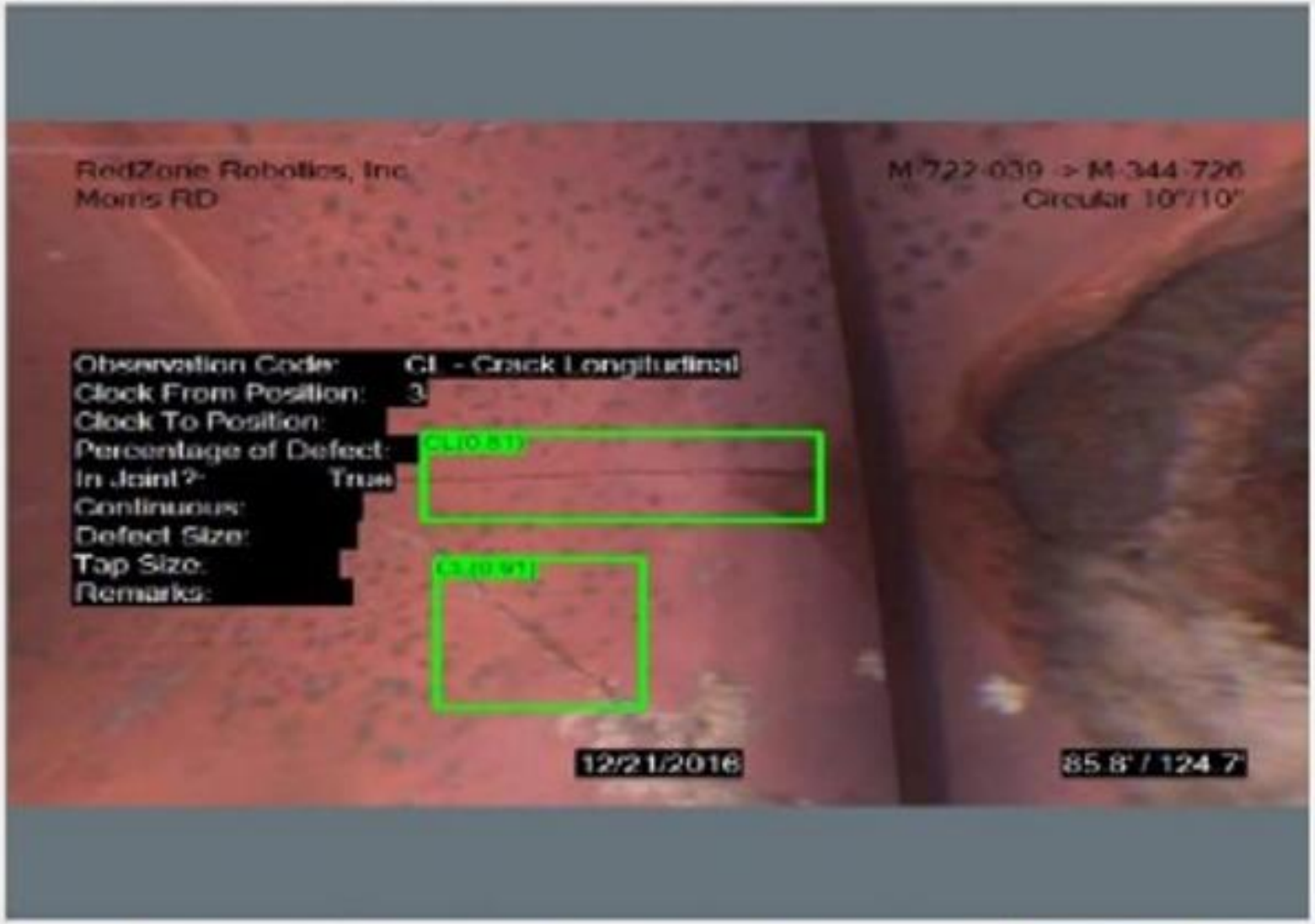

Browse

Load

Mark as False

Regenerate Report

Conservation

AI for Earth

AGRICULTURE

In order to feed the world's rapidly growing population, farmers must produce more food, on less arable land, and with lower environmental impact

WATER

In less than two decades, demand for fresh water (for human consumption, agriculture, and hygiene) is projected to dramatically outpace supply

BIODIVERSITY

Species are going extinct beyond the natural rate by orders of magnitude, driving the decay of key ecosystem services, like pollination, that humans depend upon

CLIMATE CHANGE

An increasing variable climate, extreme weather events, rising sea levels, higher global temperatures, and increased ocean acidity threaten human health, infrastructure, and the natural system we rely on for life itself


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Thank You

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