

Super



Artificial Intelligence: Permitting and Project Readiness



What Should We Expect of AI?

Solve the World's Problems?

- Increase efficiency and safety
- Create abundant utopia
- Unlock scientific breakthroughs

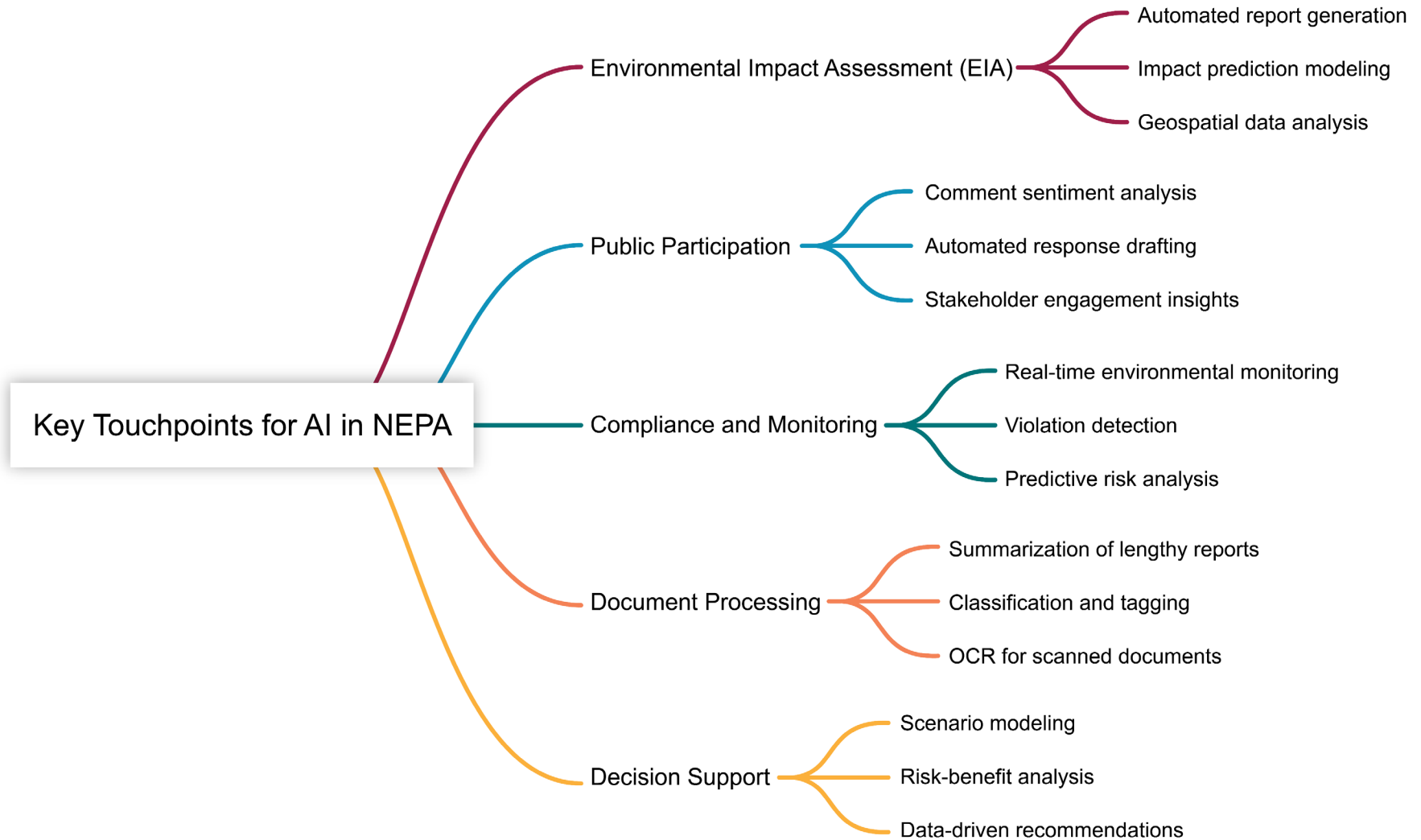
Human Apocalypse?

- Eliminate jobs
- Discover and create lethal biological weapons
- Gain "awareness" and eliminate humanity

Which is it?



AI and NEPA/Permitting Applications



AI and NEPA/Permitting

Not Without Risk

Data Bias

AI models can perpetuate historical inequities or reflect biased training data, impacting equity and environmental justice.

Hallucinations

AI can sometimes produce confident-sounding but false information — especially risky in technical or legal contexts.

Overreliance

AI should augment, not replace, human expertise. Blind trust in automation can lead to serious oversights.

Federal Leadership – Washington is Leaning In (sort of)



NEWS GALLERY LIVESTREAM ELECTION INTEGRITY SAVE AMERICA TRUMP ACCOUNTS RATEPAYER PROTECTION

PRESIDENTIAL ACTIONS

Updating Permitting Technology for the 21st Century

Presidential Memoranda | April 15, 2025

The Government does not properly leverage technology to effectively and efficiently evaluate environmental permits, causing significant delay to important infrastructure projects that impact our economic well-being. This will now change. My Administration will apply modern technologies to longstanding problems to deliver outstanding results at 21st-century speeds. To that end, and pursuant to the authority vested in me as President by the Constitution and the laws of the United States of America, I hereby direct the following:

Section 1. Policy and Purpose. Executive departments and agencies (agencies) shall make maximum use of technology in environmental review and permitting processes for infrastructure projects of all kinds, such as roads, bridges, mines, factories, power plants, and others, to:

(a) eliminate the use of paper-based application and review processes;

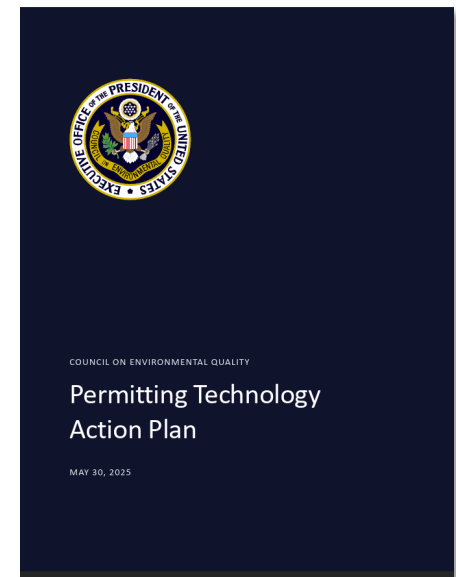


THE WHITE HOUSE

EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES

Winning the Race AMERICA'S AI ACTION PLAN

JULY 2025



EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES

COUNCIL ON ENVIRONMENTAL QUALITY

Permitting Technology Action Plan

MAY 30, 2025



PROGRAM DETAILS ▾ EXPO SUBMIT

Modernizing federal permitting for the 21st century

The Council on Environmental Quality invited innovators to share tech solutions that will accelerate federal environmental review and permitting.

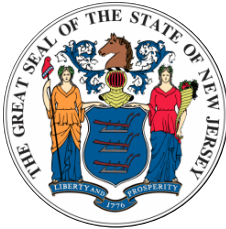
[Sign up for reminders and updates](#)

**Permitting
Innovators**

State Leadership



AI – assisted permit review



Cross-agency digital permitting



Permitting Transformation
Program/Access DEQ



Project-level permitting
dashboard

State Leadership

Arkansas is also leaning in with EO 26-04

- Directs state permitting agencies to look for processes that can be eliminated, consolidated, or digitized.
- AI specifically identified as a tool
- Encourages concurrent agency review, one-stop online portals, real-time status updates, and clearer permitting timelines
- Emphasizes secure adoption with human oversight

To What End?

What Does Technology Do For Permitting?

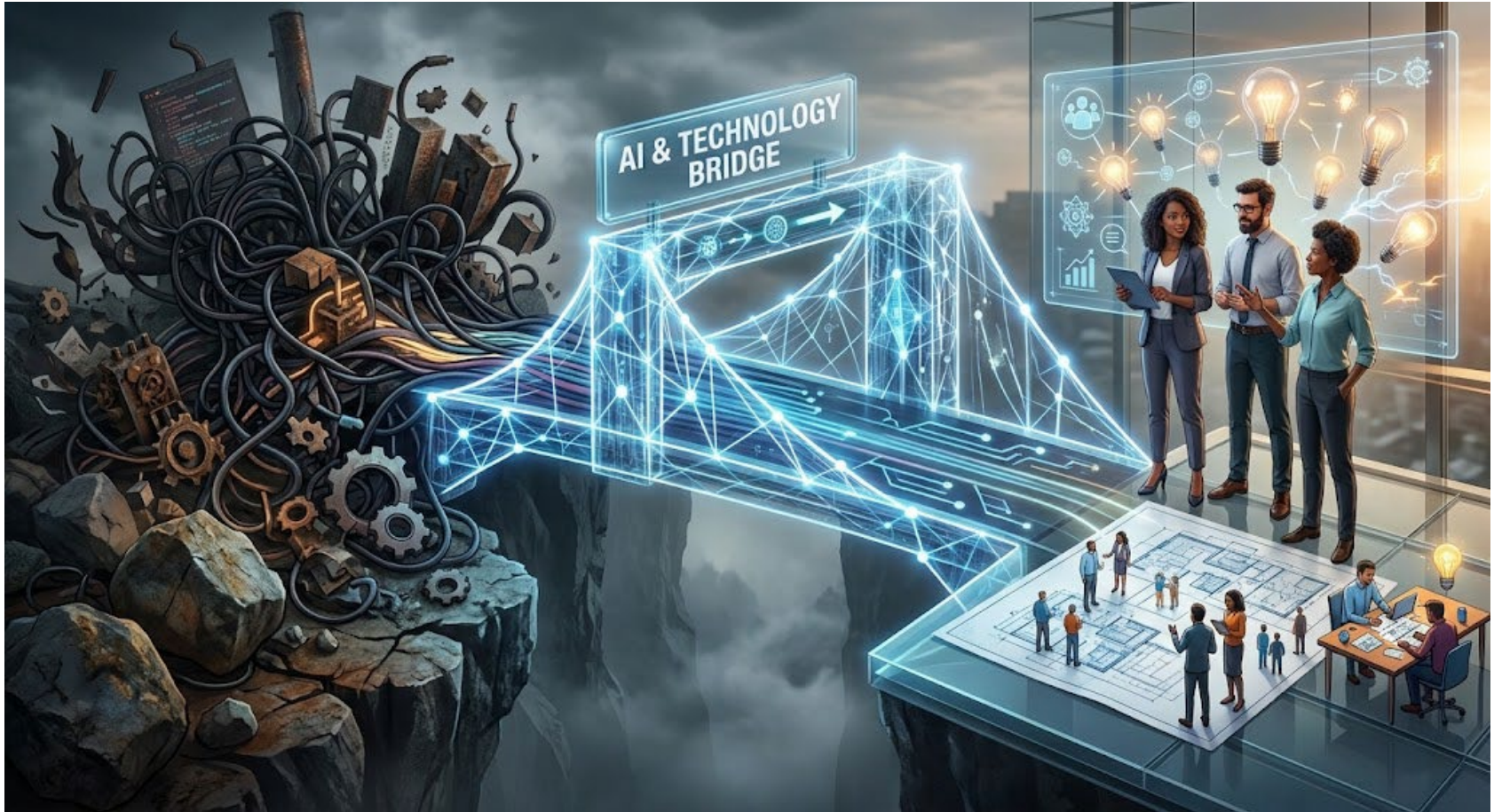
What Are We Trying to Fix?

- Fragmented Information
- Multiple Agencies and sequential Reviews
- Changing designs and site constraints
- Lengthy and complex application requirements

Can Technology Do It All?

- Can't make a wetland disappear
- Can't eliminate legal requirements
- Can't replace human judgment
- Can't guarantee an outcome

How Should We Think About AI & Technology in Permitting



Where Does AI Fit into the Project Lifecycle?



Plan

Constraints analysis and site selection



Design

Identify conflicts while still inexpensive to fix



Permit

Support applicant and regulator in application development and review



Construct

Turn permit conditions into field requirements



Operate

Track compliance obligations and emerging issues

Plan: Identify Constraints and Mitigate Risks



What Should We Know Now?



Where are the constraints?

Wetlands, floodplains, species, cultural resources, communities



What does the project need?

Power, water, transportation, discharge, workforce



What approvals are likely?

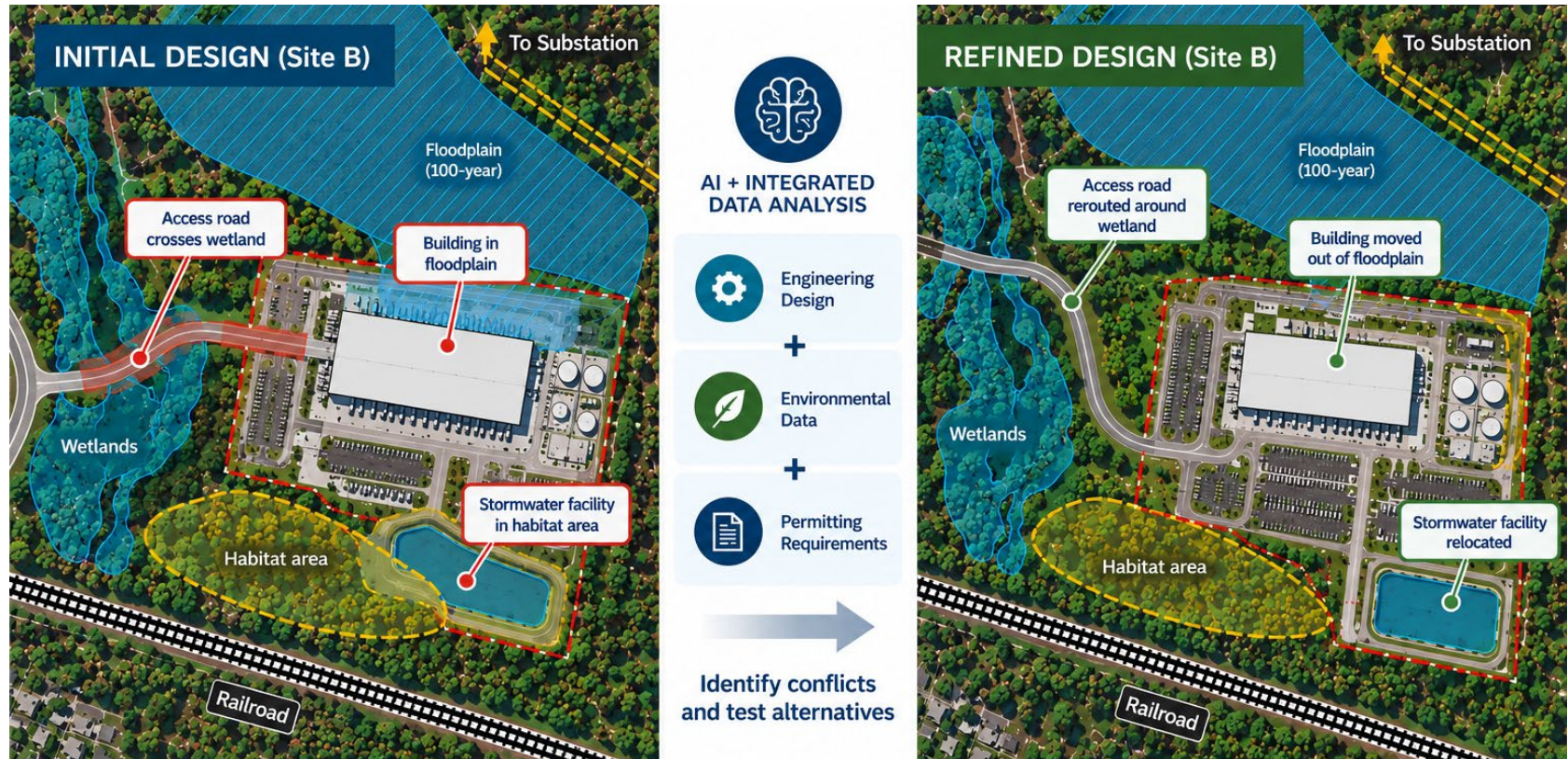
Federal, state, and local pathways



Where are the risks?

Fatal flaws, data gaps, schedule, and permitting uncertainty

Design – Resolve Conflicts While Changes are Cheaper



Integrate
Engineering +
environmental data

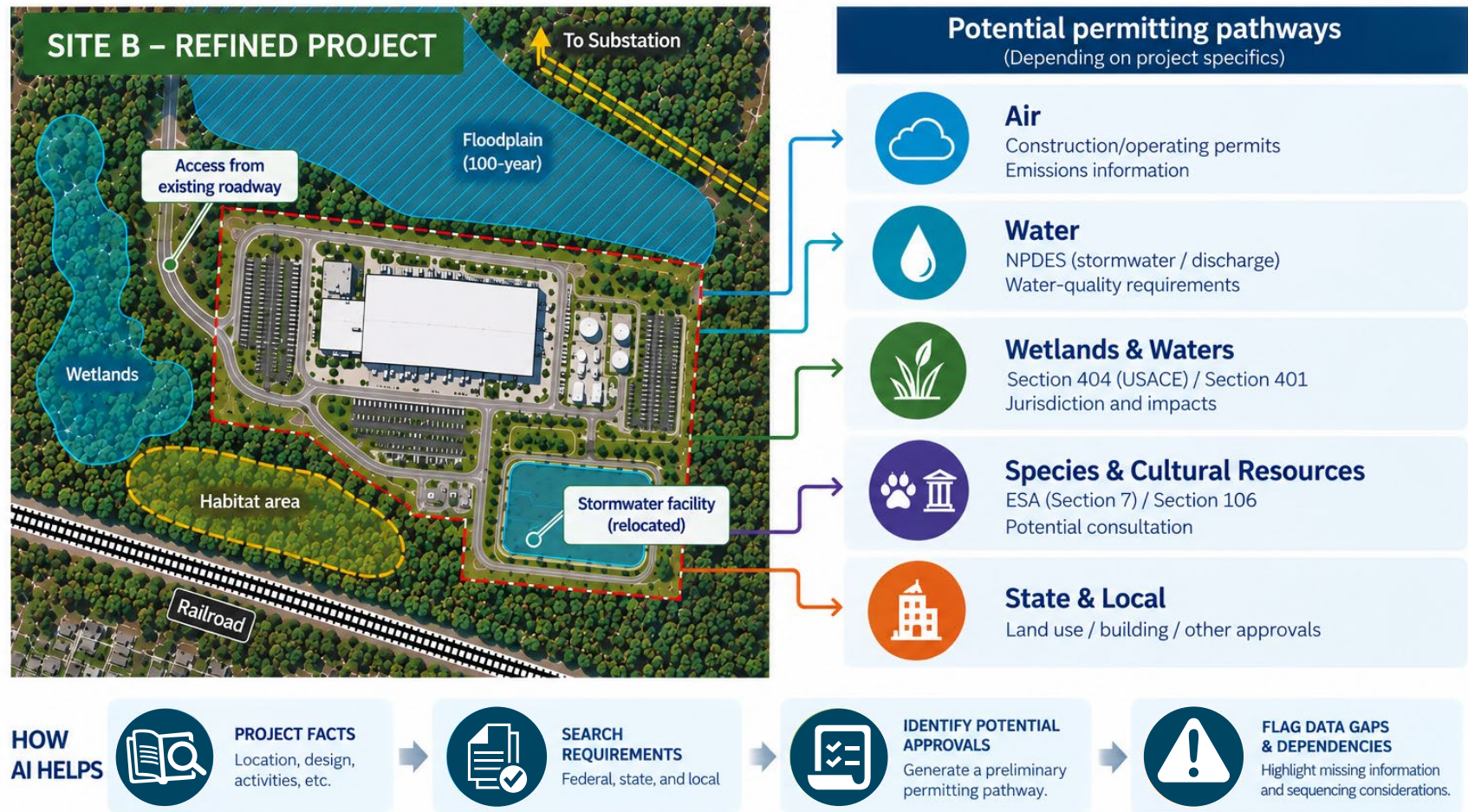


Test
Alternatives quickly

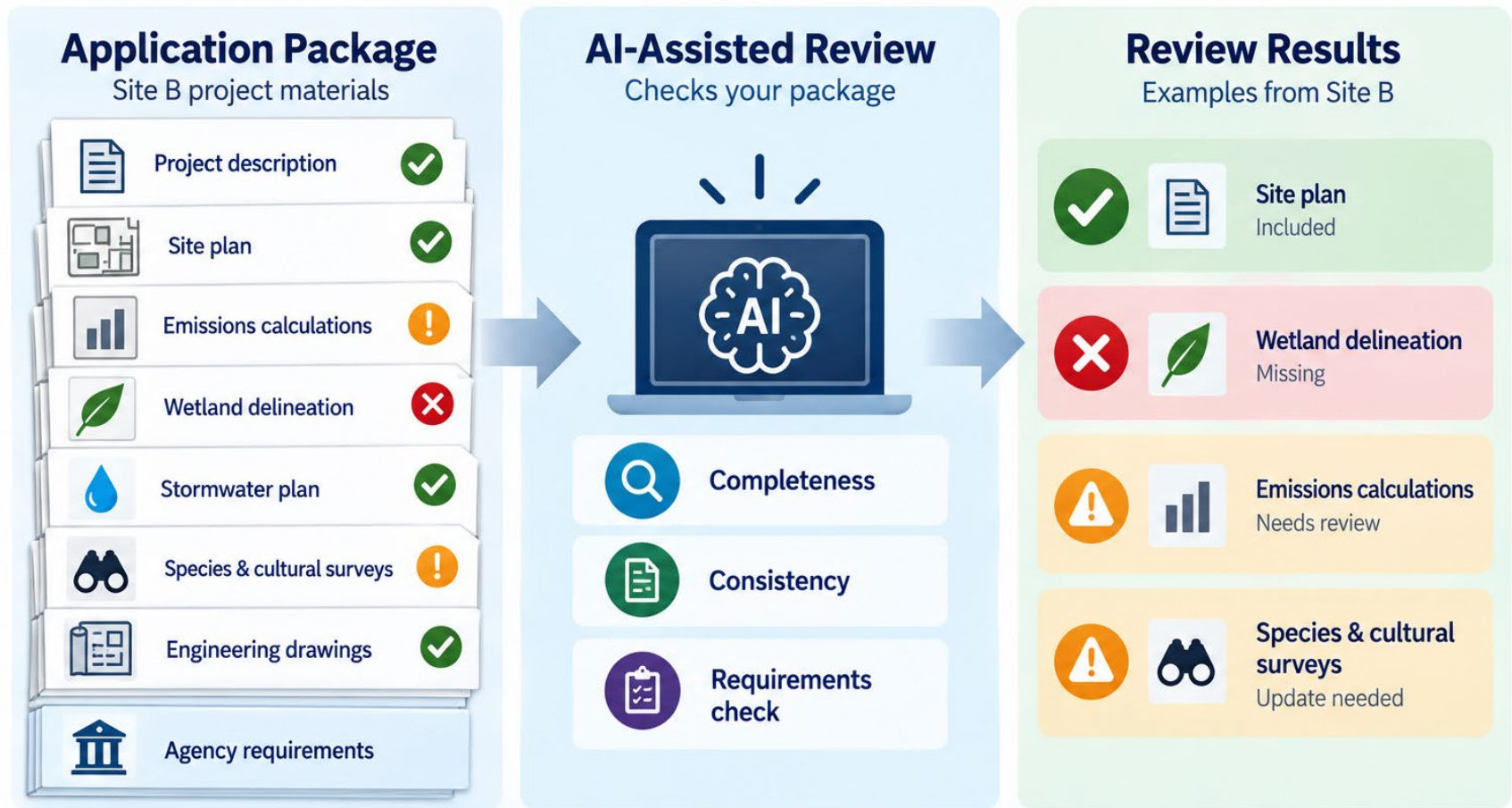


Adjust
Before design becomes
a commitment

Permit – Chart a Course to Navigate the Permitting Pathway



Permit – Submit a Better Application



Construct – Permit Conditions Become Field Requirements



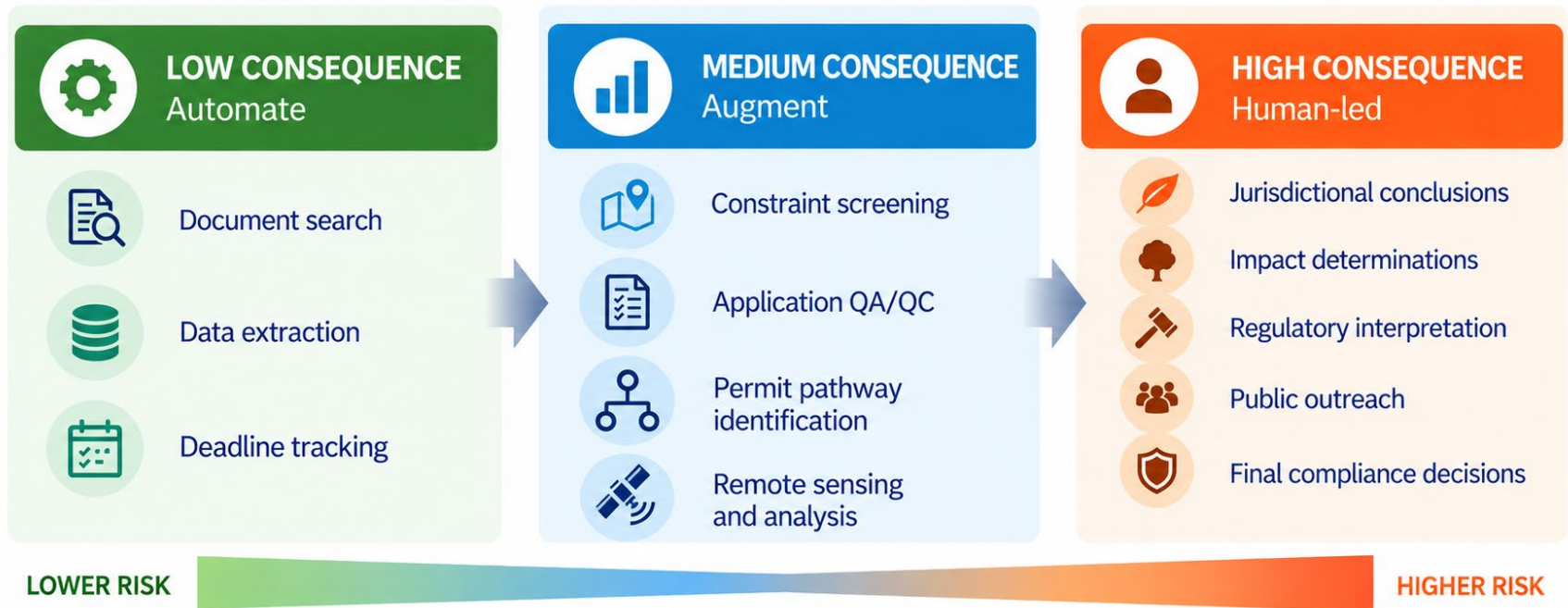
Operate – Data Supports Compliance



What Is AI Actually Doing?



Not Every Task Should Be Automated



Solutions Can Be Too Good to Be True



AI PERMITTING™
One platform. Every permit. Instant answers.

- ✓ Analyze your project
- ✓ Identify required permits
- ✓ Generate application materials
- ✓ Get to approval faster

PERMITS SOLVED!

AI PERMITTING™
ONE PLATFORM.
EVERY PERMIT.
INSTANT ANSWERS.
SNAKE OIL NOT REQUIRED
(BUT STILL OPTIONAL)

- ✓ Simple
- ✓ Fast
- ✓ Guaranteed results



How Do You Pick The Right Tool?



DOMAIN EXPERTISE

Were practitioners involved?



- ✓ Environmental and permitting experience
- ✓ Understands real-world challenges
- ✓ Built with practitioner input



AUTHORITATIVE DATA

Where does it get its information?

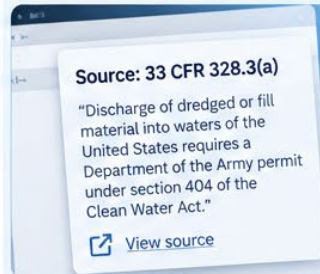


- ✓ Uses credible, up-to-date sources
- ✓ Cites regulations, guidance and data
- ✓ Incorporates site-specific information



TRACEABILITY

Can I see the source?

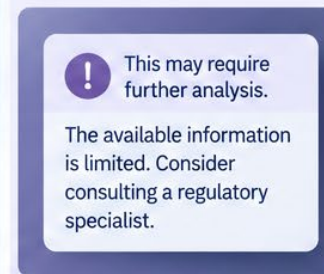


- ✓ Provides citations and links
- ✓ Shows how the answer was generated
- ✓ Lets you verify information



UNCERTAINTY

Does it know when it doesn't know?



- ✓ Clearly communicates limits
- ✓ Flags assumptions
- ✓ Identifies when expert review is needed



HUMAN OVERSIGHT

Who validates the answer?



- ✓ Built for human review and validation
- ✓ Fits into existing workflows
- ✓ People remain accountable for final decisions

What Should We Be Doing Now?

Experiment Responsibly



1

START SMALL

Pick defined, repetitive problems.

- Start with a clear use case
- Choose something measurable
- Build internal confidence



2

USE YOUR DATA

Put your information to work.

- Permits and conditions
- Plans and studies
- Monitoring data
- Commitments and compliance records



3

KEEP PEOPLE IN THE LOOP

Apply expertise and judgment.

- Use AI to inform, not decide
- Involve subject matter experts early
- Escalate as consequences grow



4

MEASURE THE RESULT

Make sure it delivers real value.

- Save time
- Reduce errors
- Improve project readiness
- Strengthen compliance
- Scale what works

Where Does That Leave Us?

Utopia?

Human
apocalypse?

A better project.



Fewer
surprises.



Better
information.



Earlier
decisions.



Better
applications.



Stronger
compliance.

AI doesn't need to transform humanity
to transform how we deliver projects.



Eric Beightel

Federal Strategy Director
Environmental Science Associates

ebeightel@esassoc.com

202-816-8445

Questions?