

Proposed Changes to Definition of Waters of the United States

Implications for Infrastructure Projects

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ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.

Only Two Things You Can Count On in Life (actually 3)

1. Death
2. Taxes
3. Change



Clean Water Act

- a.k.a. **Federal Water Pollution Control Act Amendments of 1972** (expansion of the Federal Water Pollution Control Act of 1948)
- Major amendments were enacted in the **Clean Water Act of 1977** and the **Water Quality Act of 1987**
- CWA Section 404 requires USACE permit to place dredged/fill into WOUS
- Question is: **What is a WOUS?**

In the old days life was simple ...



Waters were either water bodies or wetlands

Jurisdictional if:

- Tidal/Navigable
- OHWM present
- All 3 wetland criteria met

Waterbody

Determined by **Ordinary High Water Mark (OHWM)**

“...the line on the shore established by the fluctuations of water and indicated by the presence of characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, and or other appropriate means that consider the characteristics of the surrounding area.” (33 CFR 328.3(e))

Also **Mean High Tide (MHT) Line**

Wetland

“Those areas that are inundated or saturated by surface or ground **water** at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of **vegetation** typically adapted for life in saturated **soil** conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” 40 CFR 230.3(t)

Determined using USACE **1987 Wetland Delineation Manual** and Regional Supplements

Three criteria -hydrology, vegetation, soil

A brief history ...

- US vs Riverside Bayview (1985)
- Migratory Bird Rule (1986)
- SWANCC (2001)
- Rapanos vs US; Carabel vs US (2006)
- JD Guidance, Guidebook & RGL 07-01 on JD Process (2007)
- EPA Connectivity Report (2013)
- EPA/USACE Proposed WOUS Definition (2014)



Current WOUS Definition (1986)

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in **interstate or foreign commerce**, including all waters which are subject to the ebb and flow of the **tide**;
- (2) All **interstate waters** including interstate wetlands;
- (3) All **other waters** such as **intrastate** lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect **interstate or foreign commerce** including any such waters:
 - (I) Which are or could be used by interstate or foreign **travelers** for recreational or other purposes; or
 - (ii) From which fish or **shellfish** are or could be taken and sold in interstate or foreign commerce; or
 - (iii) Which are used or could be used for **industrial** purposes by industries in interstate commerce;

Current WOUS Definition (1986)

(4) All **impoundments** of waters otherwise defined as waters of the United States under this definition;

(5) **Tributaries** of waters identified in paragraphs (1) through (4) of this section;

(6) The **territorial sea**;

(7) **Wetlands adjacent** to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section;

Current WOUS Definition Summary

- All navigable waters, the territorial seas, plus...
- their tributaries, impoundments, and adjacent wetlands and isolated waters where the use, degradation or destruction of such waters could affect interstate or foreign commerce.

SWANCC (2001)



- *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers*, 531 U.S. 159
- Supreme Court dismissed the long controversial "migratory bird rule"
- “**Isolated waters**” no longer jurisdictional based on solely on migratory bird use

Rapanos (2006)

- *Rapanos v. United States*, 547 U.S. 715
- rejected the position of limitless CWA authority
 - relatively permanent flow
 - continuous surface water connection
 - "significant nexus" to a traditional navigable waterway
 - Nexus exists where wetland or waterbody, either by itself or in combination with other similar sites, significantly affects the physical, biological, and chemical integrity of the downstream navigable waterway

CWA Jurisdiction Following Rapanos

- **Traditionally Navigable Waters** (perennial streams)
- **Relatively Permanent Waters** (perennial or intermittent streams)
- Wetlands **adjacent** to (or **abutting**) TNWs
- Wetlands **abutting** RPWs

Significant Nexus Test Needed

- Non-relatively Permanently Waters (intermittent or ephemeral stream)
- Wetlands adjacent to RPWs
- Wetlands abutting non-RPWs
- Wetlands adjacent to non-RPWs
- Isolated wetlands (except SWANCC)
- Ditches that are excavated through wetlands, drain wetlands, or are RPWs



Proposed WOUS Definition

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in **interstate or foreign commerce**, including all waters which are subject to the ebb and flow of the **tide**;
- (2) All **interstate** waters, including interstate wetlands;
- (3) The **territorial seas**;
- (4) All **impoundments** of waters identified in paragraphs (a)(1) through (3) and (5) of this section;
- (5) All **tributaries** of waters identified in paragraphs (a)(1) through (4) of this section;

Proposed WOUS Definition

(6) All waters, including wetlands, adjacent to a water identified in paragraphs (a)(1) through (5) of this section; and [note: “waters” replaced “wetlands”]

(7) On a case-specific basis, other waters, including wetlands, provided that those waters alone, or in combination with other similarly situated waters, including wetlands, located in the same region, have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section.

Adjacent

- **Bordering, contiguous** or **neighboring**.
- Waters, including wetlands, **separated** from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like **are** “adjacent waters.”

Neighboring

- waters located within the **riparian area** or **floodplain** of a water identified in paragraphs (a)(1) through (5) of this section, or
- waters with a **shallow subsurface hydrologic connection** or **confined surface hydrologic connection** to such a jurisdictional water
- New definition
- Very broad

Riparian Area

- An area bordering a water where surface or subsurface hydrology directly influence the ecological processes and plant and animal community structure in that area
- Riparian areas are **transitional areas** between aquatic and terrestrial ecosystems that influence the exchange of energy and materials between those ecosystems
- New Definition
- Very Broad

Floodplain

- An area bordering inland or coastal waters that was formed by sediment deposition from such water under present climatic conditions and is inundated during periods of moderate to high water flows
- New Definition
- Very Broad

Tributary

- Means a water physically characterized by the presence of a **bed and banks** and **ordinary high water mark**, as defined at 33 CFR 328.3(e)
- Tributary continues even if, for any length, there are one or more **man-made breaks** (such as bridges, culverts, pipes, or dams), or one or more **natural breaks** (such as wetlands at the head of or along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an OHWM can be identified upstream of the break

Significant Nexus

- Means that a water, including wetlands, either alone or in combination with other **similarly situated** waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section), **significantly affects** the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. For an effect to be significant, it must be more than **speculative** or **insubstantial**

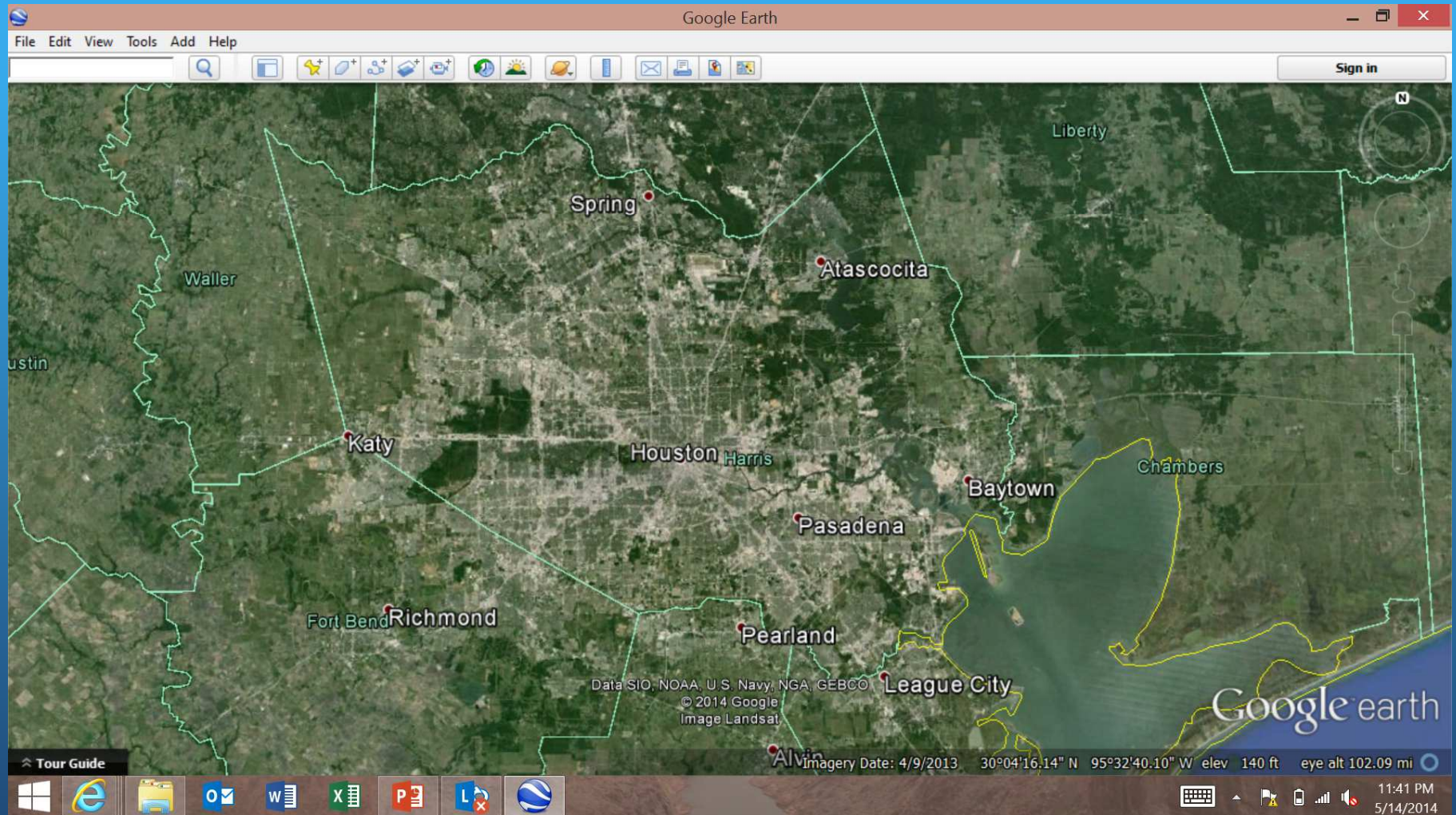
Significant Nexus

- Other waters, including wetlands, are **similarly situated** when they perform similar functions and are located sufficiently close together or sufficiently close to a “water of the United States” so that they can be evaluated as a **single landscape unit** with regard to their effect on the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section

Jurisdictional Ditches

- Natural streams that have been altered
- Ditched excavated in WOUS, including jurisdictional wetlands
- Ditches that have perennial flow
- Ditches connecting two or more WOUS

Current vs Proposed Jurisdiction

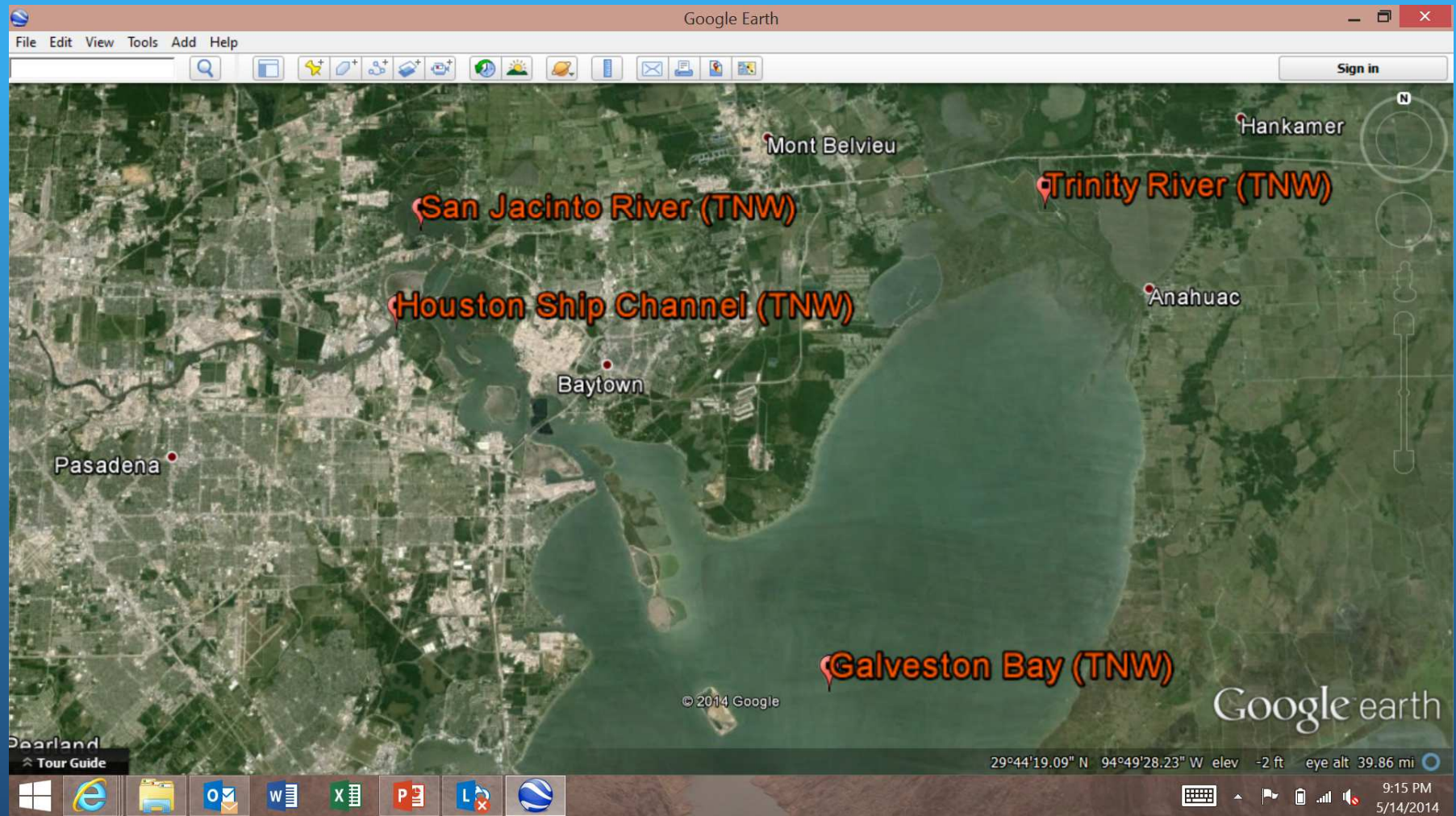


Red = Jurisdictional by Rule

Yellow = Significant Nexus Test

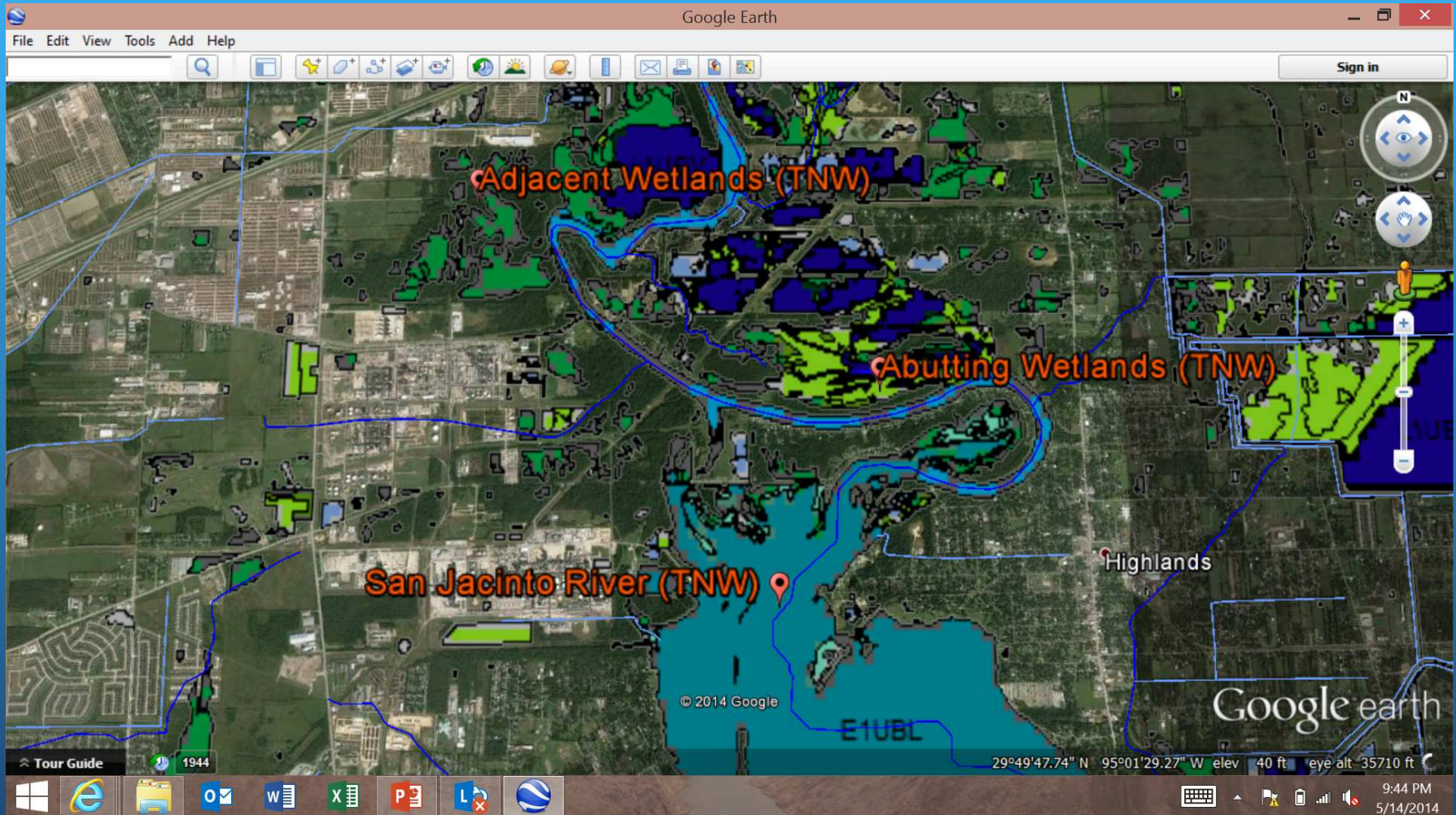
Green = Non-jurisdictional

Traditional Navigable Waters (TNW)



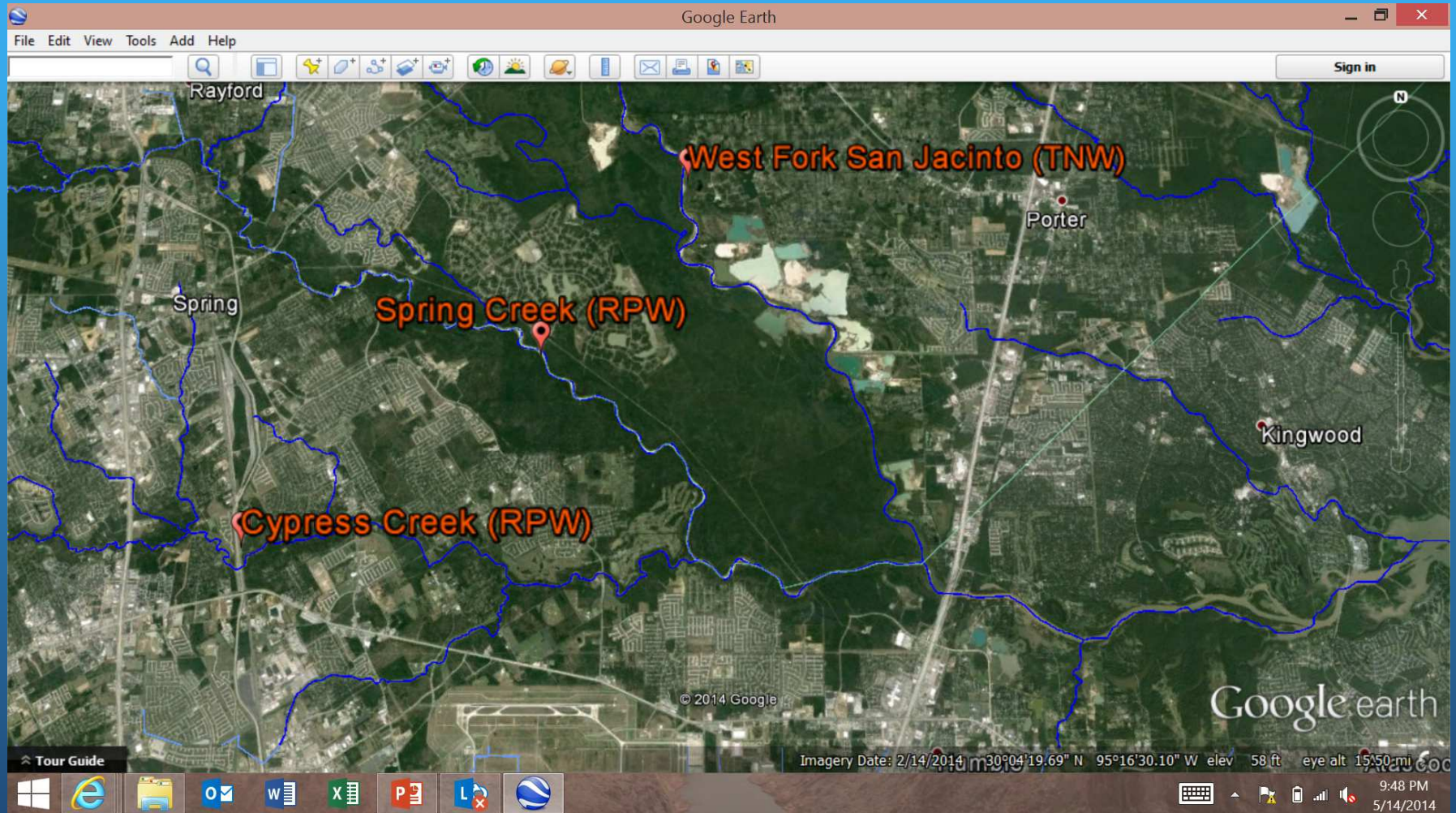
No change

Abutting/Adjacent Wetlands (TNW)



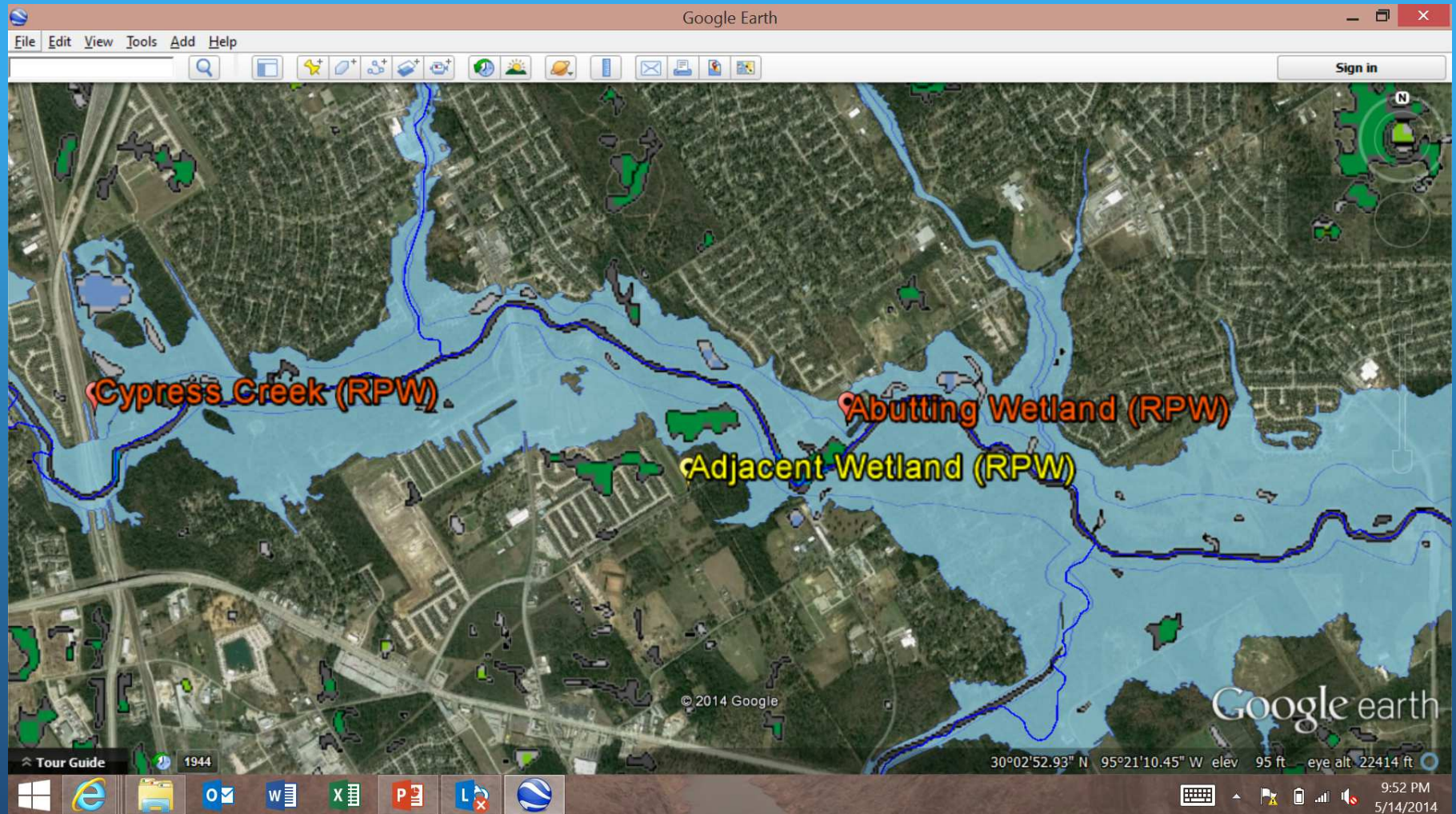
Proposed change from Wetlands to Waters

Relatively Permanent Waters (RPW)



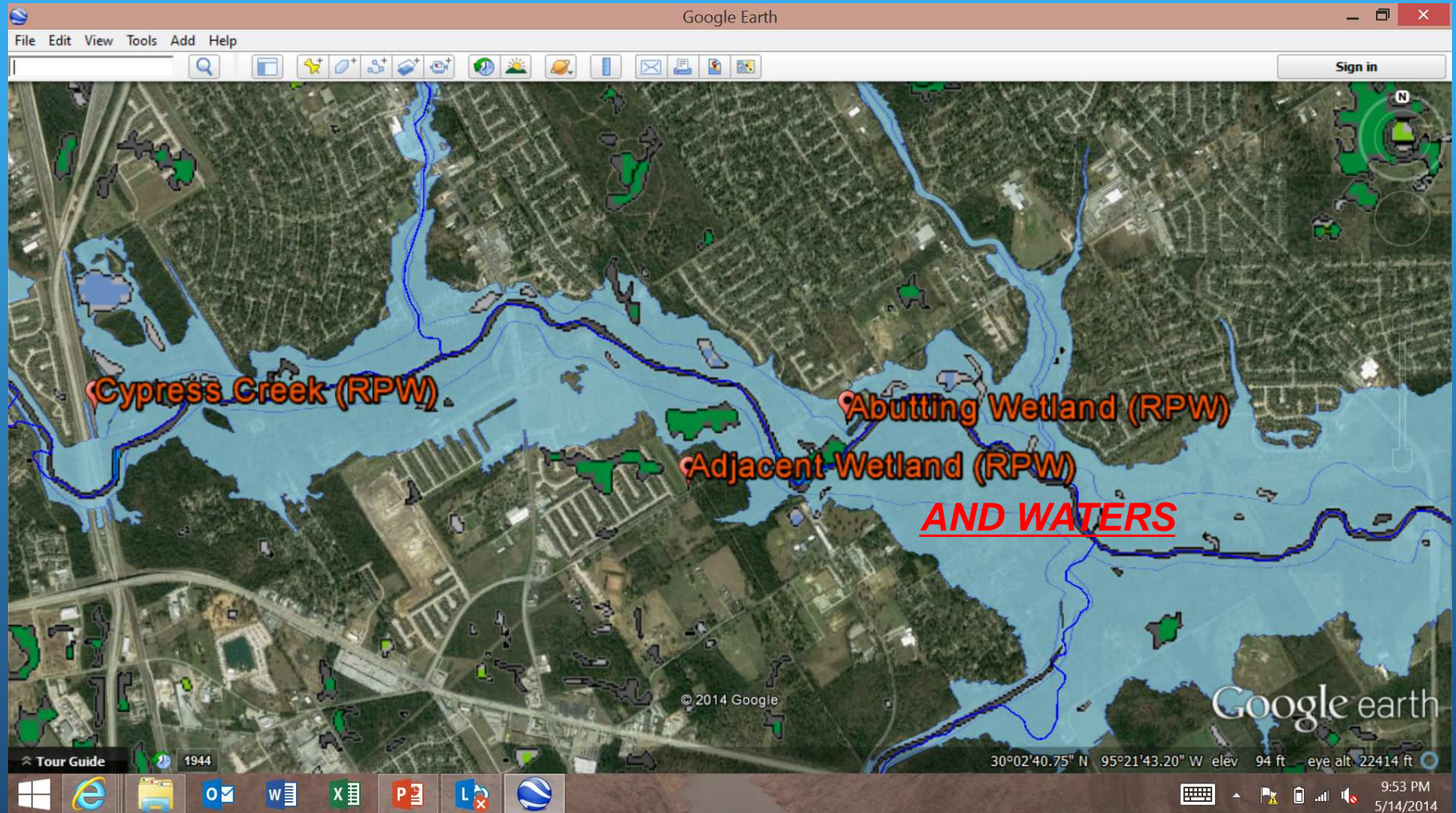
No change

Adjacent/Abutting Wetlands (RPW)



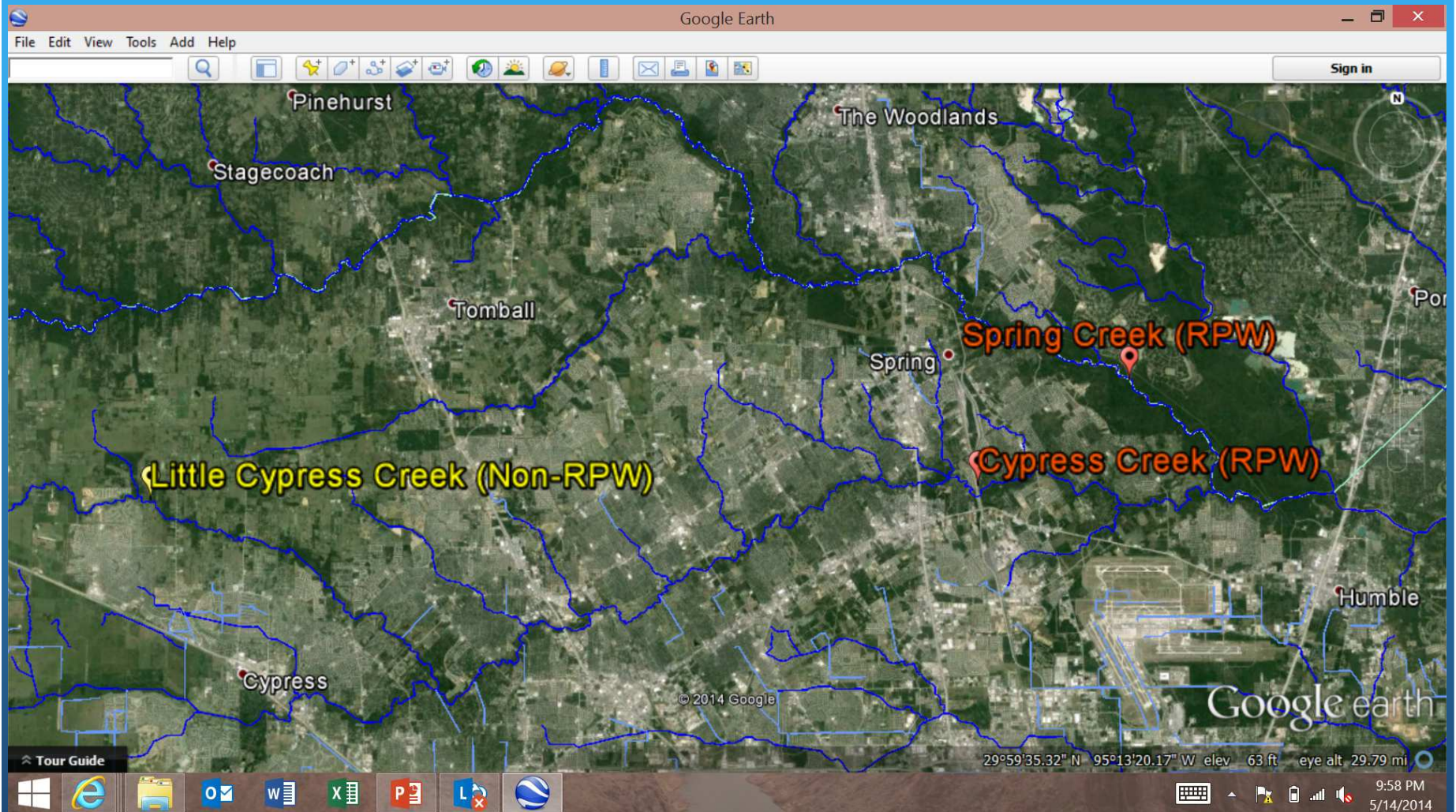
Current WOUS Definition

Adjacent/Abutting Wetlands (RPW)



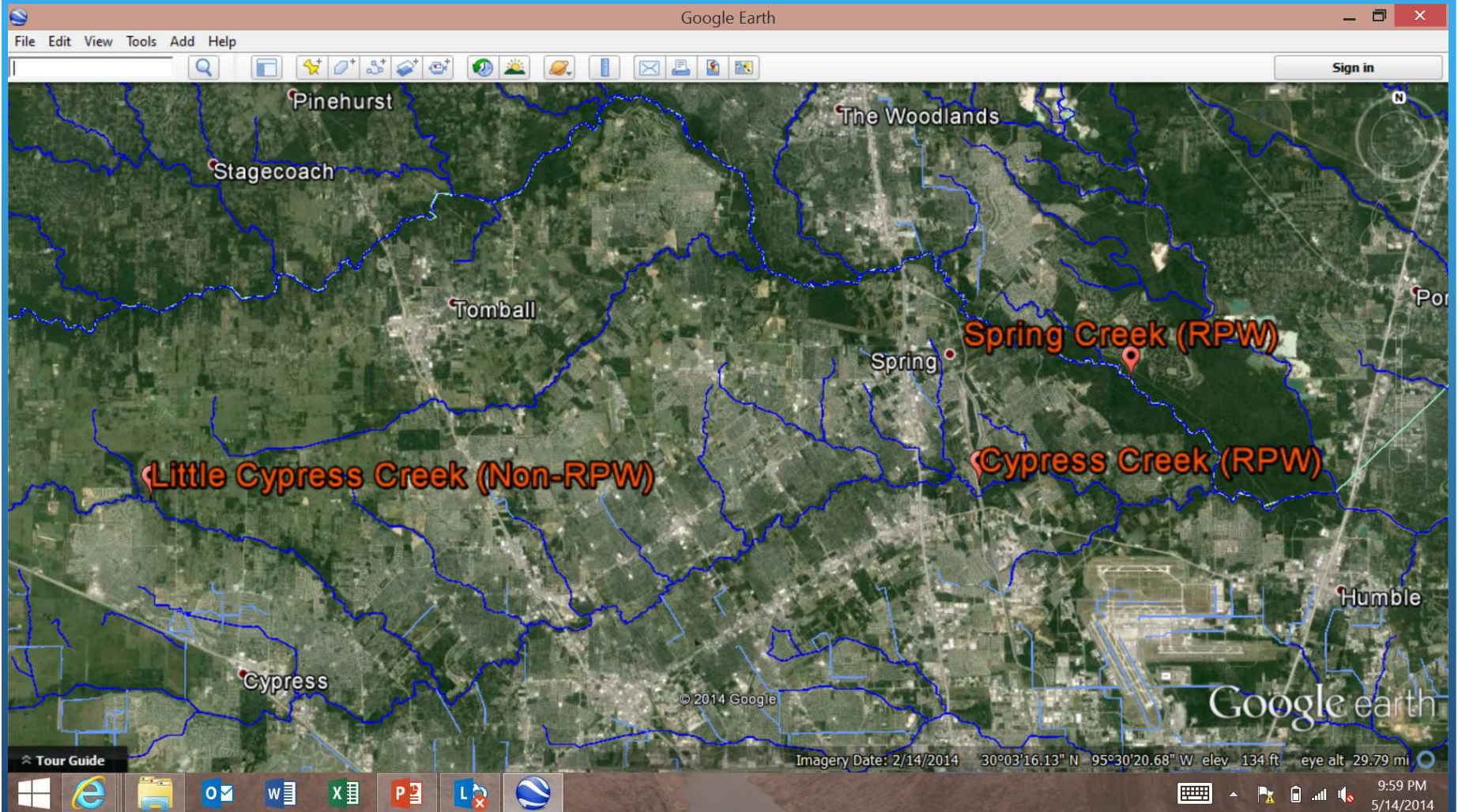
Proposed WOUS Definition

Non-RPW



Current WOUS Definition

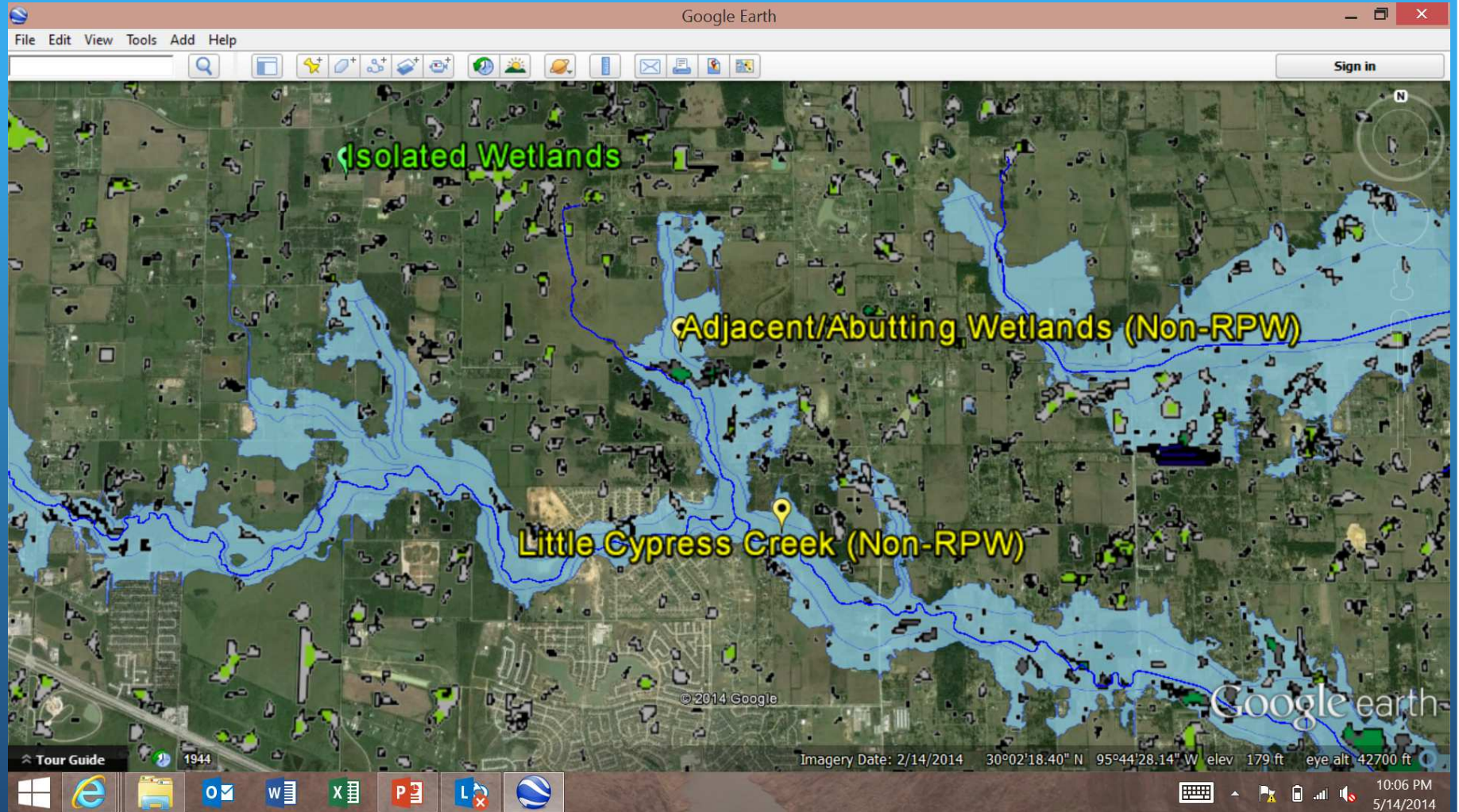
Non-RPW



Proposed WOUS Definition

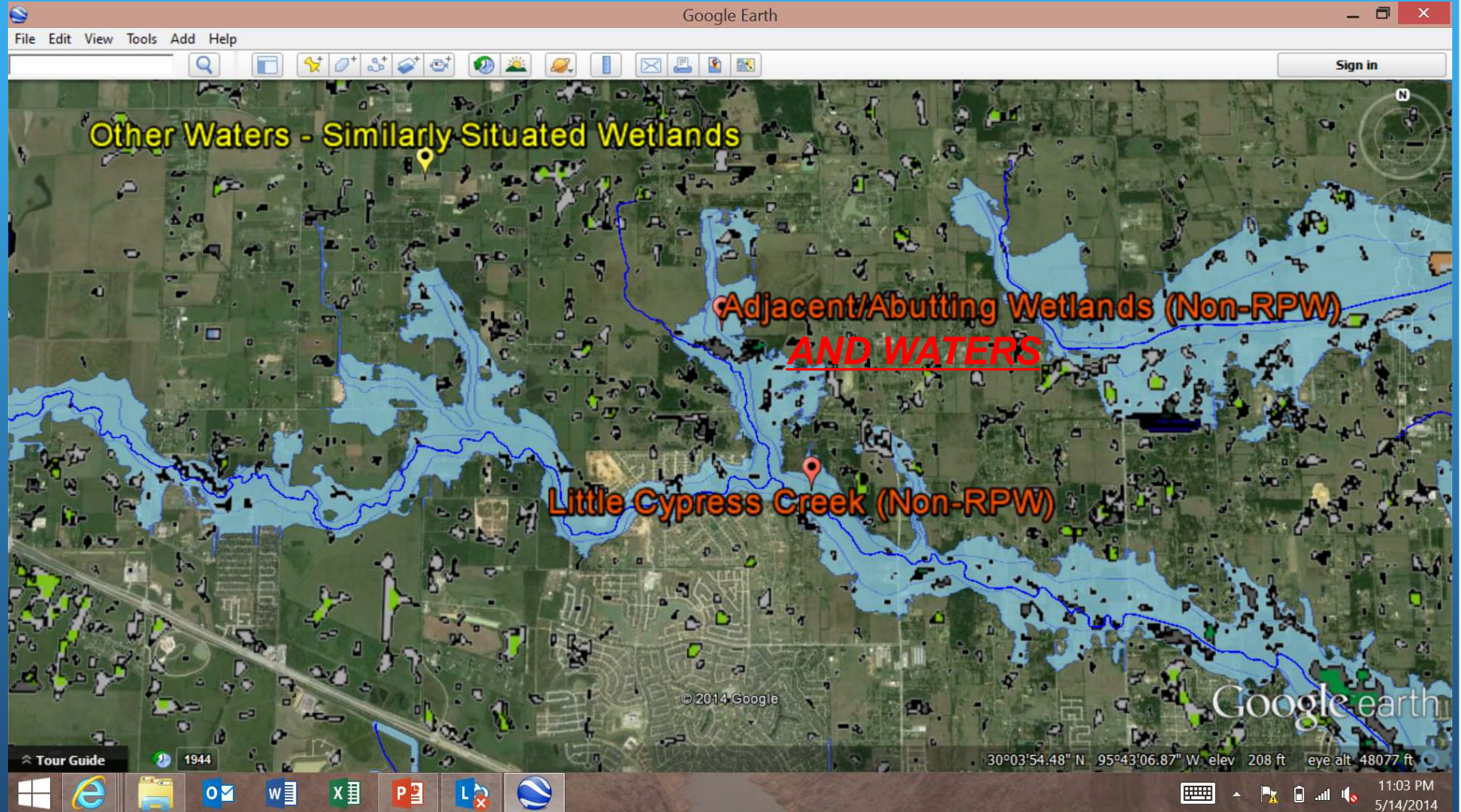


Adjacent/Abutting Wetlands (Non-RPW)



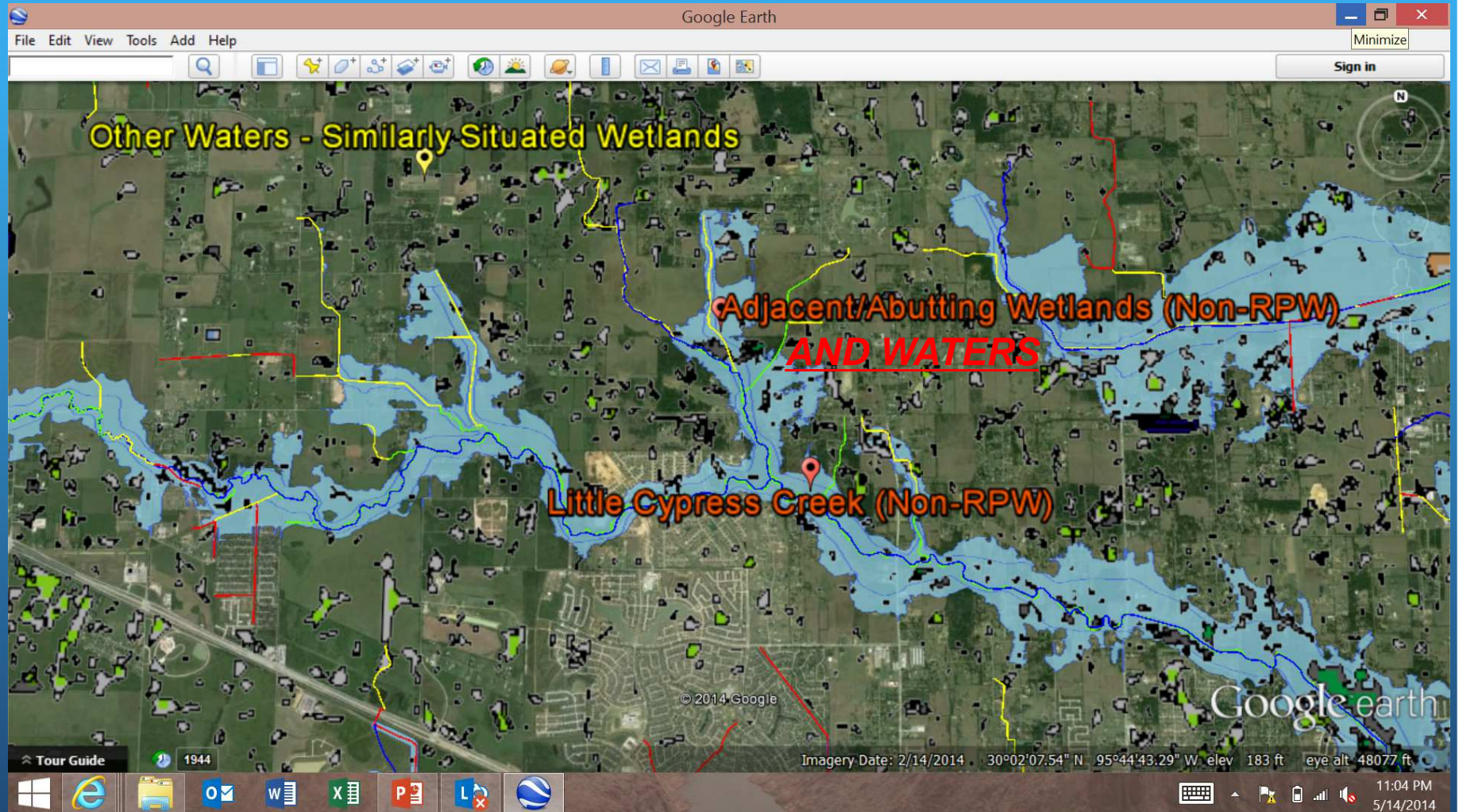
Current WOUS Definition

Adjacent/Abutting Wetlands (Non-RPW)



Proposed WOUS Definition

Adjacent/Abutting Wetlands (Non-RPW)



Proposed WOUS Definition (with ditches)

Effects on Industry

- Increase in WOUS by 3% (including 17% “other waters” currently not jurisdictional)*
- Estimated increased cost to regulated entities and governments \$162 - \$279 million per year*
- U.S. Army Corps of Engineers Permitting workload increase

* per EPA and USACE “Economic Analysis of Proposed Revised Definition of Waters of the United States”

Effects on Industry

- **USACE** CWA Section 404 Permitting
 - Pipelines = little impact (temporary fill, using PJDs)
 - Facilities = potential impact (permanent fill, expanded jurisdiction)

Effects on Industry

- NPDES **Construction** Stormwater Permitting
 - Based on size of activity (>1 ac) (*no effect*)
- NPDES **Industrial** Stormwater Permitting
 - Based on discharge to **MS4** and/or **WOUS** (*potential effect*)
 - **No discharge** to MS4/WOUS = **no permit**
 - Definition change could affect need for permit
 - Ex. Facility discharging to **roadside ditch**
 - Ex. Facility discharging to **isolated water**

Ramifications

- **Expanded jurisdiction**, especially along the Gulf Coast, California, Central Great Plains, Atlantic Coastal Plain, Desert Southwest (*mentioned repeatedly in Preamble*)
- Potentially more **ditches** and **ponds** become jurisdictional
- **Shorter timelines** for JDs due to fewer SN tests
- **Greater certainty** on jurisdiction of tributaries and adjacent wetlands (jurisdictional by rule)
- **Less certainty** on formerly non-jurisdictional “isolated” wetlands that can be deemed “similarly situated”
- Increased permitting and mitigation **costs**

Questions?

<http://www2.epa.gov/uswaters>

Comment Period Ends
11/14/14

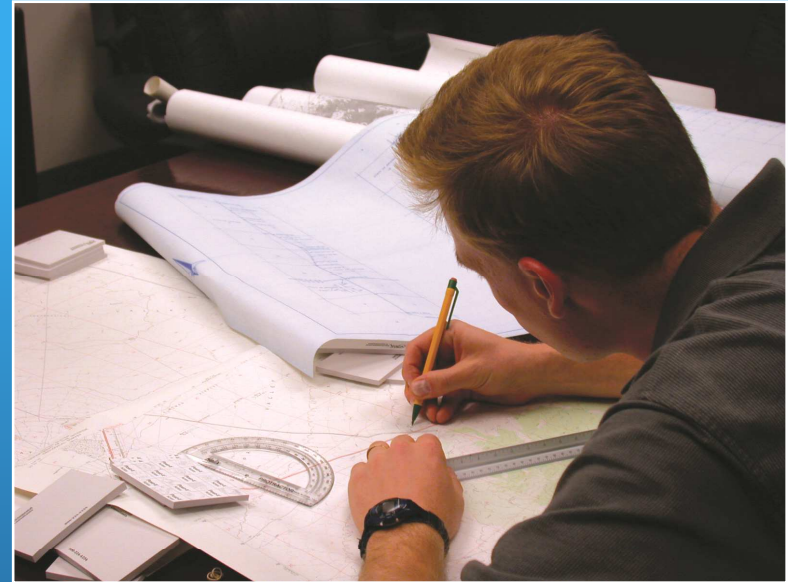
About Us

- Founded in Flagstaff, Arizona, in 1981
- Corporate headquarters based in Phoenix
- Employee-owned
- Specializing in natural and cultural resource management, environmental planning, regulatory compliance, and sustainability services
- More than 750 cultural and natural resource scientists and planners company-wide in more than 27 offices
- *Engineering News-Record* Top 200 Environmental Firm and Top 500 Design Firm



Staff Experience

- Experience across North America
- Extensive experience and excellent working relationships with government and regulatory agencies
- In-depth knowledge of permitting and compliance protocols



Business Lines

- Energy Generation
- Mining
- Oil and Gas
- Transmission
- Transportation
- Water Agencies
- Government Agencies
- Land Development



Energy Generation

SWCA's energy experts have in-depth knowledge of the many project phases and compliance hurdles in the generation industry – whether renewable energy resources such as wind, solar, and geothermal or more traditional sources like coal. Our comprehensive services guide clients through every step of the generation process – from initial Plans of Development and right-of-way applications to resource surveying and post-construction monitoring.



Mining

Our expertise in environmental studies and compliance has been a powerful tool in helping mining companies secure regulatory approval for their hard rock, sand, and gravel mining efforts as well as reclamation and restoration operations. Having provided permitting support for some of the nation's largest mining operations, we can help both project owners and the public understand the effects of mining operations on environmental resources.



Oil and Gas

SWCA helps oil and gas clients meet their goals of producing and distributing fuel in the fastest, most efficient way possible. With experience in conventional and unconventional oil and gas development, we understand the constraints, permitting timelines, and supporting infrastructure needs of our clients. Our in-depth knowledge of federal, state, and local environmental regulations allows us to assist in all phases of development, from conceptual design and planning through construction, operation, and closeout.



Transmission

We provide complete environmental services to support all types of electric transmission projects, from routing, siting, and permitting new lines to re-build and capacity-increase projects. We help clients manage issues such as multi-state line crossings, the complex mix of public and private land ownership for line siting, the visual impact of lines for communities, and the full array of transmission-related environmental impacts.



Transportation

We help transportation planners solve complex mobility and safety issues while preserving environmental quality. Local Departments of Transportation and other roadway, railway, port, trail, and aviation facility managers consistently utilize our consulting services for projects with a high environmental profile. We can assist with pre-construction planning and permitting, project construction monitoring, and post-construction project management.



Government Agencies

We provide natural and cultural resource management and environmental planning, permitting, and compliance services to state, local, and tribal government agencies. In addition to our GSA schedule contracts, we maintain multiple award schedule contracts, blanket purchase agreements, agency task order contracts, and a variety of Indefinite Delivery-Indefinite Quantity (IDIQ) task order contracts.



Water Agencies

Our technical experts ensure that surface, ground, storm and wastewater resources are evaluated and properly monitored, and we assist with permitting requirements for new and replacement infrastructure. We work with public utilities and water management agencies on local and regional levels, offering technical expertise on all aspects of water management, including conservation, pollution prevention, and treatment as well as water rights issues and well design.



Land Development

We provide environmental consulting services to private land developers and landowners for master planned communities as well as urban, open space, commercial, resort, and recreational development projects. SWCA also assists federal and state agencies as well as development, mining, and transportation clients with services for land exchanges.



Services

- Cultural Resources
- Natural Resources
- Air Quality
- Environmental Planning
- Environmental Permitting
- GIS
- Environmental Compliance
- Climate Change/Sustainability
- Water Resources



Cultural Resources

SWCA's cultural resource management services help clients recognize, assess, and preserve cultural resources while avoiding or minimizing the impact of development on those resources. We assist clients in complying with cultural resource laws and regulations, among them the National Historic Preservation Act. In addition to specialized training in archaeology, historic preservation, cultural resources compliance monitoring, and tribal consultation/ethnography, our staff members have local experience and strong relationships with agency archaeologists and State Historic Preservation Offices.



Natural Resources

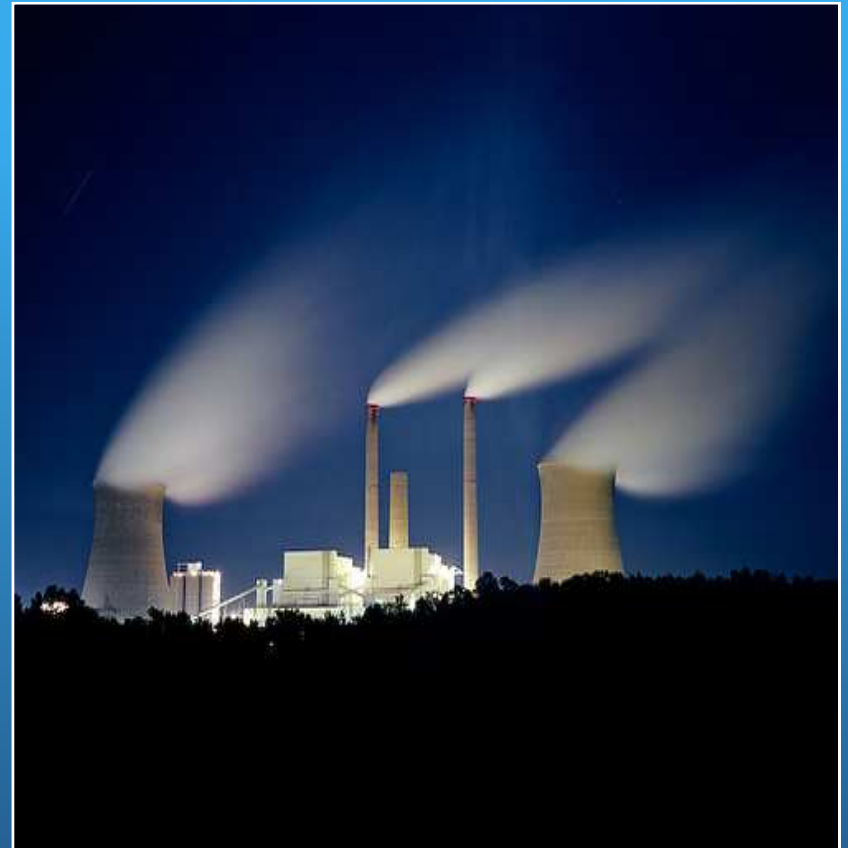
With a diverse group of biologists, ecologists, paleontologists, and other technical specialists, we help project developers address the full array of biological, aquatic, terrestrial, and water issues. We specialize in all areas of natural resource management, including planning, mitigation, and permitting related to the Endangered Species Act and other legislation for terrestrial and aquatic species and their habitats.



Air Quality

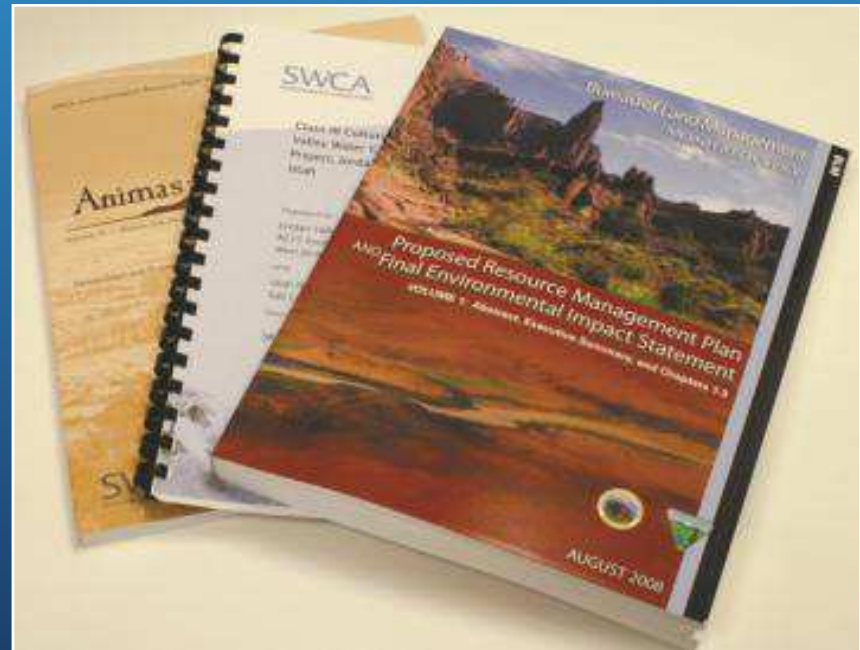
Our job is to help commercial, industrial, and government facilities comply with air quality requirements while reducing operational costs and risks. We have expertise in federal, state, and local permitting and compliance processes and air quality issues such as the Acid Rain Program, Clean Air Interstate Rule, NOx Budget Program, and greenhouse gases.

Our agency experience allows us to quickly and efficiently obtain permit approval. We help clients identify air emissions sources and quantify emission factors, as well as provide compliance development, auditing, emissions inventories, and reporting to appropriate regulatory agencies.



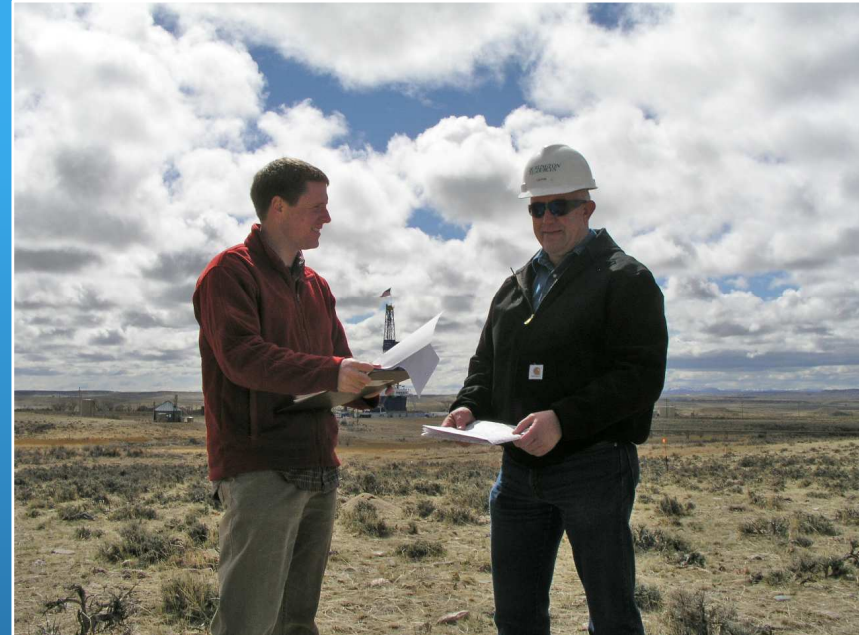
Environmental Planning

SWCA planning experts understand how to manage the specific plans of our clients in the context of environmental resources and established regulatory requirements. Our planners can define objectives, provide documentation assistance, gather community input, offer alternatives and solutions, and facilitate stakeholder collaboration to keep projects in full compliance with environmental regulations.



Environmental Permitting

Our in-depth local resource knowledge, strong agency relationships, and thorough understanding of the intricacies of ordinances at all levels of government facilitate timely permit approvals to eliminate project surprises and delays. Our permitting experts identify short- and long-term strategies to meet client goals by determining which environmental permitting requirements apply to the project and adapting permitting efforts to the client's economic, ecological, regulatory, and resource conditions.



GIS

Our geospatial technology experts provide a full spectrum of geographic information services, including geospatial data creation, integration, analysis, visual simulation, and application development. We use industry-standard GIS, CAD, GPS, and remote sensing applications for seamless integration of geospatial-based technology with planning, management, and decision needs.

In addition to in-the-field mapping, we use web-based virtual mapping and spatial modeling tools that simulate real-world conditions to provide real-time data that can be viewed in a dynamic, 3-D environment to “predict” the visual aspect of project outcomes.



Environmental Compliance

From construction monitoring and site inspections to full environmental protection plans, our environmental compliance services ensure that clients meet project deadlines while adhering to regulatory requirements associated with their projects.

Among the services we offer are:

- FERC permit compliance management and monitoring for energy-related engineering and construction projects
- Environmental inspections and environmental quality control and assurance programs
- Environmental compliance training for construction personnel



Climate Change and Sustainability

SWCA's environmental scientists and planners provide comprehensive greenhouse gas (GHG) inventories and data management systems for large companies and government agencies, as well as Prevention of Significant Deterioration GHG permitting for power generation facilities. With our expertise in natural resource management and ecology, we understand the link between climate change and the natural environment and can provide comprehensive climate adaption and mitigation planning and solutions, as well as sustainability management and planning services.



Water Resources

- **Water Resource Permitting** — Driven primarily by the Clean Water Act, our water resources permitting services focus on hydrological phenomena such as the movement and distribution of both surface and groundwater.
- **Water Resource Management** — We survey rivers, streams, wetlands, and other distinct water bodies to perform appropriate studies. We work with clients whose projects may impact nearby water resources and determine quality, quantity, and other aspects to help implement mitigation, monitoring, and overall management plans.





- SWCA Office Locations
- ★ SWCA Corporate Office



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Presentation Abstract

- On March 25, 2014, the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers (USACE) jointly proposed a new rule to change the existing definition of “waters of the United States”, potentially affecting the extent of jurisdiction these agencies would exercise under the Clean Water Act (CWA). SWCA’s presentation will offer a brief history of Supreme Court decisions and regulatory leading up to this proposed change, the EPA and USACE rationale for the change, and a comparison of the existing versus the proposed definition of “waters of the United States”. SWCA will also present a hypothetical case study of predicted jurisdictional changes on the Texas Gulf Coast, starting at Galveston Bay and extending into the Katy Prairie west of Houston.