

Redefining “Waters of the U.S.”

Under the Clean Water Act

How it Might Affect Local Planning

CWA Background

CLEAN WATER ACT (CWA) 33 U.S.C. §1251 et seq. (1972)

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States (WOTUS) and regulating quality standards for surface waters. The basis of the CWA was enacted in **1948** and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in **1972**.

STATE REGULATION OF NON-CWA WATERS IN NEVADA

- **No coverage:** Nevada does not have a regulatory program under state law addressing dredge and fill activities in its waters and wetlands. It relies on Clean Water Act § 401.
- Nevada has **not enacted** legislation nor issued regulations to cover waters that are outside of the scope of federal law under *SWANCC* and *Rapanos*.

Existing Case Law

Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (2001)

Congress did not intend the CWA to reach “*isolated ponds, some only seasonal*” that were located wholly within one state, where the lone asserted basis for federal jurisdiction was their use as habitat by migratory birds. After *SWANCC*, waters deemed to be “**isolated**” have been vulnerable to losing their CWA protection, and no intrastate, non-navigable, isolated waters have been found to be jurisdictional.

Rapanos v. United States (2006)

CWA coverage for a wetland where the wetland has a continuous surface connection with a relatively permanent body of water that is connected to traditional interstate navigable waters. Justice Kennedy’s concurring opinion in *Rapanos* would find coverage for wetlands where there is a **significant nexus** between the wetlands and downstream waters — i.e., where the wetlands, “*either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’*”

What the Rule Does

Reduces confusion about CWA protection

Determining when the CWA protected streams and wetlands became confusing and complex following the *SWANCC* and *Rapanos* Supreme Court decisions in 2001 and 2006

Clarifies types of waters covered under the CWA

Specifically, the proposed rule clarifies that under the CWA:

- Most seasonal and rain-dependent streams are protected.
- Wetlands near rivers and streams are protected.
- Other types of waters may have more uncertain connections with downstream water and protection will be evaluated through a case specific analysis of whether the connection is or is not significant. However, to provide more certainty, the proposal requests comment on options protecting similarly situated waters in certain geographic areas or adding to the categories of waters protected without case specific analysis.

Streams and Wetlands

- Streams and wetlands benefit communities
 - Streams and wetlands trap floodwaters, recharge groundwater supplies, remove pollution, and provide habitat for fish and wildlife.
- Streams and wetlands are economic drivers
 - Streams and wetlands play an important role in fishing, hunting, agriculture, recreation, energy, and manufacturing.
- Upstream waters impact downstream waters
 - About 60 percent of stream miles in the U.S. only flow seasonally or after rain, but have a huge impact on the downstream waters.
- Streams provide drinking water for 1 in 3 people
 - Approximately 117 million people- one in three Americans- get drinking water from public systems that rely on seasonal, rain-dependent, and headwater streams.

What the Rule Does Not Do

- Does not protect any new types of waters
 - The proposed rule does not protect any new types of waters that have not historically been covered under the CWA.
- Does not broaden coverage of the CWA
 - The proposed rule is consistent with the Supreme Court's more narrow reading of CWA jurisdiction.
- Does not regulate groundwater
- Does not expand jurisdiction over ditches
 - The rule actually proposes to reduce jurisdiction and exclude certain ephemeral and intermittent ditches.

Agriculture

- Input from agriculture community shaped the proposal
 - For the past 4 years, EPA and USACE have listened to important input from the agriculture community. Using the input from those discussions, the agencies then worked with the U.S. Department of Agriculture to ensure that concerns raised by farmers and the agricultural industry were addressed.
- Exemptions and exclusions are preserved
 - All agricultural exemptions and exclusions from CWA requirements that have existed for nearly 40 years have been retained with clarification.

Why Do a Rulemaking?

- Rulemaking was requested by many stakeholders
 - For nearly a decade, members of Congress, state and local officials, industry, agriculture, environmental groups, and the public have asked for a rulemaking to provide clarity
- Enforcement of the law has been challenging
 - The lack of clarity in CWA protection has made enforcement of the law difficult in many cases
- Supported by the latest peer-reviewed science
 - This includes a scientific assessment by EPA titled *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*, which presents a review and synthesis of more than 1,200 pieces of scientific literature

Over 1 million comments

- Agencies have consulted with stakeholders
 - EPA and USACE consulted extensively with stakeholders for the past several years.
- Public input was considered
 - The agencies considered over 1,000,000 comments received since the Supreme Court decisions.
- Outreach across the country
 - The agencies conducted a robust outreach effort, holding discussions around the country and gathering input needed to shape a final rule.

Final Rule

- Much of the final rule incorporates long-standing EPA and USACE guidance, regulations, and common practice regarding which waters are considered **jurisdictional**.
- Some portions of the rule, however, break new ground. Focused largely on applying the "**significant nexus**" test from the 2006 *Rapanos* case, these new provisions in practice could operate to **substantially expand** the areas regulated under the CWA.
- In **Nevada**, the final rule poses unique concerns for the regulated community due to Nevada's topography and arid climate. Several Nevada industries in particular—including the **mining**, oil and gas, **construction**, **municipal**, **renewable energy**, and **agricultural** sectors—should closely examine the final rule for potential impacts to planned and ongoing projects and operations.

General Structure of the Final Rule

The final rule classifies waters into three general categories:

- **Waters that are Jurisdictional by Rule:** The final rule identifies six categories of waters that are *per se* jurisdictional
 - traditional navigable waters
 - interstate waters
 - territorial seas
 - impoundments of jurisdictional waters
 - "tributaries" (as defined)
 - "adjacent" waters (as defined)
- **Waters requiring case-specific significant nexus analysis:** The final rule identifies certain waters that require a case-specific, significant nexus determination.
- **Excluded waters:** The final rule categorically *excludes* certain waters, including certain ditches, groundwater, artificially irrigated areas, artificial lakes and ponds, water filled depressions incidental to mining or construction, and certain storm water and waste treatment systems.

Jurisdictional Tributaries

Perhaps the most critical, and controversial, aspect of the final rule is the inclusion of "tributaries" as a category of waters that is jurisdictional by rule.

As illustrated by the language from the rule and preamble (80 FR 37054), the agencies have taken an expansive approach, incorporating broad headwaters and watershed/ecosystem concepts into defining what constitutes a covered tributary.

Specifically:

- A tributary will be considered covered if it is a "water that contributes flow, either directly or through another water (including an impoundment [of jurisdictional waters]), to a [traditional navigable water, interstate water, or territorial sea] that is characterized by the presence of the physical indicators of **bed and banks** and an **ordinary high water mark (OHWM)**."
- A tributary "does not lose its status as a tributary if, **for any length** there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more **natural breaks** (such as wetlands 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."
- "[Transporting sediment is a critical function of tributaries] even when the covered tributaries flow **infrequently** (such as ephemeral covered tributaries), and even when the covered tributaries are **great distances** from the traditional navigable water, interstate water, or the territorial sea (such as some headwater covered tributaries)."
- "[T]he amount of water or biomass contributed by a specific ephemeral stream in a given year might be small, but the **aggregate contribution** of that stream over multiple years, or by all ephemeral streams draining that **watershed** in a given year or over multiple years, can have substantial consequences on the integrity of downstream waters."

Because tributaries in Nevada often are characterized by **natural breaks**—some spanning great distances—the final rule has the potential to **bring in many tributary waters that were previously unregulated**. That, combined with the rule's overall reliance on the ecological importance of watersheds and headwaters, means that **Nevada Planners must carefully evaluate project and operational impacts**.

Jurisdictional Adjacent Waters

- "**Adjacent**" is very broadly defined as "*bordering, contiguous, or neighboring, including waters separated from other 'waters of the United States' by constructed dikes or barriers, natural river berms, beach dunes and the like.*"
- The final rule similarly defines "**neighboring**" in a way that arguably expands the scope of potentially included waters to, among others, all waters within **100 feet** of the OHWM of a traditional navigable water, interstate water, territorial sea, **or tributary**.

Accordingly, Nevada Planners must now pay special attention to the **proximity** (not necessarily the presence of a significant nexus) of wetlands (and other waters) to other jurisdictional waters, most notably tributaries.

Case-specific Significant Nexus Analysis

The final rule codifies the agencies' proposal to regulate certain waters that are **neither jurisdictional by rule nor excluded by rule**, but which must undergo a case-specific significant nexus determination.

The first category of such site-specific waters is those determined to be "**similarly situated**" such that they must be considered *in combination* in any significant nexus analysis. These are:

- Prairie potholes;
- Carolina and Delmarva bays;
- Pocosins;
- Western vernal pools in California; and
- Texas coastal prairie wetlands.

The second category is those that are not considered similarly situated, but must individually undergo a significant nexus analysis. These are:

- Waters **within the 100-year floodplain** of a traditional navigable water, interstate water, or territorial sea; and
- Waters **within 4,000 feet of the high tide line or OHWM** of a traditional navigable water, interstate water, territorial sea, **or covered tributary**.

For the second category, a significant nexus analysis must include an assessment of whether there are similarly situated waters, as well as whether the water, alone, has a significant nexus to a traditional navigable water, interstate water, or territorial sea.

Notably, for the first time, the agencies define "**significant nexus**." The rule changes, in part, the definition articulated in *Rapanos* from a water affecting the "chemical, physical, **and** biological integrity," to a water affecting the "chemical, physical, **or** biological integrity" of a traditional navigable water, interstate water, or territorial sea.

Although subtle, the new definition arguably allows the agency to find a significant nexus where only one or two, but not all three, of the "chemical, physical, and biological" factors exist.

For example, the rule states that a significant nexus may exist when **any single** of the nine aquatic functions relevant to a significant nexus exist (including where the water provides life cycle dependent aquatic habitat for nesting, breeding, etc.).

Excluded Waters

The final rule codifies several important categories of waters excluded from CWA regulation, many for the first time. Although not a comprehensive list, the following exclusions are notable for Nevada:

- **Groundwater**, including groundwater drained through subsurface drainage systems;
- **Certain ditches**, including:
 - ditches with ephemeral or intermittent flow that are not a relocated tributary or excavated in a tributary; and
 - ditches that do not flow, either directly or through another water, into a traditional navigable water, interstate water, or territorial sea;
- **Artificially irrigated areas** that would revert to dry land should application of water cease;
- **Artificial lakes and ponds** created in dry land (e.g., watering, irrigation, and cooling ponds);
- **Water-filled depressions** created in dry land incidental to mining or construction activities, including borrow pits;
- **Erosional features** (e.g., gullies, rills, and other non-"tributary" ephemeral features);
- **Stormwater control features** constructed to convey, treat, or store stormwater that are created in dry land; and
- **Wastewater recycling structures** created in dry land (e.g., retention basins, groundwater recharge basins, and percolation ponds).

Prior to the final rule, it was unclear whether many of these categories of waters were in fact jurisdictional, and EPA and USACE (and the federal courts) often made inconsistent, case-specific determinations across different regions.

In this respect, the final rule provides much needed clarity and certainty. The devil is always in the details, however, and whether specific waters qualify for exclusion will often depend on individual facts and circumstances.

For example, many of the exclusions depend on the structure or waterbody being located in "**dry land**," which is not defined in the final rule.

In addition, although the rule expressly excludes "**groundwater**," many aspects of the rule rely on the existence of shallow subsurface hydrologic connections (e.g., tributaries may be included where they go underground and resurface, and wetlands may be determined to have a significant nexus by virtue of subsurface connections).

And, although certain ditches are excluded, the preamble is careful to note that "**ditches are jurisdictional under the**

rule ... if they both meet the definition of 'tributary' and are not excluded." Thus, although the final rule clarifies those categories of waters that are excluded from regulation, confusion as to whether a specific water feature in fact falls within a given category may often arise.

Conclusions

- Although the final rule is intended to clarify the scope of waters regulated under the CWA, it is **complex and raises several issues** that the regulated community needs to carefully consider.
- There also remains the possibility that Congress will intervene to block and require the agencies to **rewrite the rule**. Indeed, bills pending before both the House and Senate—*i.e.*, Regulatory Integrity Protection Act (H.R. 1732), which was passed by the House in May, and Federal Water Quality Protection Act (S-1140), which recently passed out of Senate committee—would require just that.
- Despite the agencies' assertions that the rule will bring predictability and consistency to the CWA program, it is certain to be the target of **multiple legal challenges**, which could mean years of litigation resulting in inconsistent judicial outcomes and the possibility that all or a portion of the rule could get overturned.

North Dakota Federal District Judge Orders Stay of Rule

August 27, 2015: The U.S. District Court for the District of North Dakota issued a ruling enjoining the EPA and USACE from implementing the rule.

- North Dakota, Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, **Nevada**, South Dakota, Wyoming and New Mexico brought suit against the rule and asked the court to stop the implementation of the rule set to go into effect August 28th.
- The court, stating that it "**appears likely that the EPA has violated its Congressional grant of authority in its promulgation of the Rule** at issue, and it appears likely that EPA failed to comply with Administrative Procedure Act requirements when promulgating the Rule," held that the factors weighed in favor of **granting the states injunctive relief** and enjoined EPA and the USACE from implementing the rule.

It is important to note that EPA has given indications that it would construe any such ruling from a district court narrowly. As such, it is unclear as to whether EPA and USACE will apply the ruling to states not involved in the North Dakota litigation.

Clean Water Rule: Definition of “Waters of the United States”

40 CFR 230.3

PART 230—SECTION 404(b)(1) GUIDELINES FOR SPECIFICATION OF DISPOSAL SITES FOR DREDGED OR FILL MATERIAL.

§230.3 Definitions.

(o) The term *waters of the United States* means:

(1) For purposes of the Clean Water Act, 33 U.S.C. 1251 *et. seq.* and its implementing regulations, subject to the exclusions in paragraph (o)(2) of this section, the term “waters of the United States” means:

(i) 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;

(ii) All interstate waters, including interstate wetlands;

(iii) The territorial seas;

(iv) All impoundments of waters otherwise identified as waters of the United States under this section;

(v) All tributaries, as defined in paragraph (o)(3)(iii) of this section, of waters identified in paragraphs (o)(1)(i) through (iii) of this section;

(vi) All waters adjacent to a water identified in paragraphs (o)(1)(i) through (v) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;

(vii) All waters in paragraphs (o)(1)(vii)(A) through (E) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section. The waters identified in each of paragraphs (o)(1)(vii)(A) through (E) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (o)(1)(vi) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (o)(1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.

(A) *Prairie potholes*. Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.

(B) *Carolina bays and Delmarva bays*. Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.

(C) *Pocosins*. Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

(D) *Western vernal pools*. Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(E) *Texas coastal prairie wetlands*. Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (iii) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (o)(1)(i) through (v) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (o)(1)(i) through (iii) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (iii) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (o)(1)(vi) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (o)(1)(vi), they are an adjacent water and no case-specific significant nexus analysis is required.

(2) The following are not “waters of the United States” even where they otherwise meet the terms of paragraphs (o)(1)(iv) through (viii) of this section.

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the

Clean Water Act are not waters of the United States.

(ii) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

(iii) The following ditches:

(A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(C) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (o)(1)(i) through (iii) of this section.

(iv) The following features:

(A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(C) Artificial reflecting pools or swimming pools created in dry land;

(D) Small ornamental waters created in dry land;

(E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

(3) In this paragraph (o), the following definitions apply:

(i) *Adjacent*. The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (o)(1)(i) through (v) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (o)(1)(i) through (v) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (o)(1)(i) through (v) or are located at the head of a water identified in paragraphs (o)(1)(i) through (v) of this section and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

(ii) *Neighboring*. The term *neighboring* means:

(A) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (o)(1)(i) through (v) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

(B) All waters located within the 100-year floodplain of a water identified in paragraphs (o)(1)(i) through (v) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain;

(C) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (o)(1)(i) or (iii) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

(iii) *Tributary* and *tributaries*. The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (o)(1)(iv) of this section), to a water identified in paragraphs (o)(1)(i) through (iii) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and

thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (o)(2) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands 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 ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (o)(1)(i) through (iii) of this section.

(iv) *Wetlands*. The term *wetlands* means those areas that are inundated or saturated by surface or groundwater 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.

(v) *Significant nexus*. The term *significant nexus* means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (o)(1)(i) through (iii) of this section. The term “in the region” means the watershed that drains to the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For purposes of determining whether or not a water has a significant nexus, the water’s effect on downstream (o)(1)(i) through (iii) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (o)(3)(v)(A) through (I) of this section. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (o)(1)(i) through (iii) of this section. Functions relevant to the significant nexus evaluation are the following:

- (A) Sediment trapping,
- (B) Nutrient recycling,
- (C) Pollutant trapping, transformation, filtering, and transport,
- (D) Retention and attenuation of flood waters,
- (E) Runoff storage,
- (F) Contribution of flow,
- (G) Export of organic matter,
- (H) Export of food resources, and
- (I) Provision of life cycle dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (o)(1) through (3) of this section.

(vi) *Ordinary high water mark*. The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(vii) *High tide line*. The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.