Written Statement of Testimony of Wesley P. Mehl
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Committee on Science, Space and Technology
Subcommittee on Environment
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The Arizona State Land Department and Section 404 Permitting
November 29, 2017

Introduction

My name is Wesley Mehl. I am the Deputy Commissioner of the Arizona State Land Department ("ASLD"). [1] As the manager of 9.2 million acres of State Trust Land, ASLD is the largest single non-federal landowner in Arizona, and as such has a strong interest in the administration and regulatory reach of the Section 404 permit program.

Summary of Main Points

- The Section 404 permit, which is essentially a construction permit regulating land development, has proven to be the most burdensome and complicated permit requirement faced by ASLD.

- **The Rule should be consistent with Congressional Intent**: It is Arizona's view that the original intent of Congress was not to use the Clean Water Act as a blanket regulation to cover all waters. Federal jurisdiction may extend beyond navigable waters to particular non-navigable water bodies and wetlands, but only in cases where water features affect navigable waters and are identifiable based on clear, objective characteristics.

- **The Rule Should Provide Clarity:** The Executive Order on reviewing the WOTUS rule directs both EPA and the Department of the Army to consider interpreting the term "navigable waters" in a manner consistent with Justice Scalia's opinion in *Rapanos v. United States*, 547 U.S. 715 (2006). Two of the main tenets of this opinion are that WOTUS must be "relatively permanent waters", and that wetlands must have a "continuous surface connection" to a relatively permanent water to be considered a WOTUS. Arizona believes that relatively permanent waters in Arizona include perennial and seasonal waters. Seasonal waters include any waters that flow at any time during the year as a result of factors other than storm flow. "Ephemeral" waters, i.e. waters that flow only in response to storm events, would not be included. Similarly, wetlands would only be considered a WOTUS if they have a continuous connection to a WOTUS, and the connection is at least seasonal.

- The ambiguity of the 404 rule, and the difficulty in applying the rule in the arid West, is clearly demonstrated in three existing 404 permit areas on ASLD Trust Land. The three permit areas, in urban infill areas of North Phoenix, have experienced significantly diminished demand as a result of complications arising from the permits: a significant loss of developable land

[1] On behalf of Arizona's Land Commissioner Lisa A. Atkins, we thank Robert Anderson, who represents ASLD on 404 matters, for significant assistance in the preparation of this written testimony.

(effectively 18-20%), severe complications arising from configuration problems presented by mandated on-site mitigation corridors, significantly increased infrastructure costs, disproportionate cost and complications arising from planting requirements. We estimate that the direct and indirect impact of these three permits alone will cost the State more than $700m, when accounting for loss of land, increased infrastructure costs, project delays and other impacts.

- All past iterations of the 404 rules have disproportionately affected arid climates, and in particular, those areas with alluvial fan conditions.

- The rules and guidance pertaining to "ordinary high water mark" are suited to perennial streams, and present significant ambiguity in the context of arid desert climates. What is an ordinary water mark for an ephemeral wash that runs less than 4% of the year, and is subject to change in course depending on rainfall patterns? In such a context, "bed and bank" analysis is misleading, and a significant nexus analysis can be economically unfeasible.

- A clear rule that resolves ambiguity, including those ambiguities presented by the question of significant nexus would allow the United State Army Corps of Engineers (the "Corps") to fairly administer the program in an expeditious manner, and avoid significant costs to the regulated community and the public.

- Arizona appreciates the Environmental Protection Agency's ("EPA") recent push for cooperative federalism. Arizona believes that primacy on Section 404 would allow the State of Arizona to both improve 404 permit processing time for customers, and increase certainty and consistency in WOTUS determinations, thus improving environmental outcomes and minimizing regulatory uncertainty for businesses.

- ASLD enjoys a good relationship with the local Corps office. ASLD appreciates their professionalism, and has great respect for the staff with whom we have worked. ASLD also believes that the Corps would benefit greatly from a change in the Rule consistent with Justice Scalia's opinion in *Rapanos*.

Background

A Section 404 permit is a federal permit required pursuant to Section 404 of the Clean Water Act, 33 U.S.C. §1344, for discharging "dredged or fill material" to "navigable waters." Section 404 was enacted in 1972 as part of comprehensive amendments to the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act. The Act included two permit programs typically encountered in land development and affecting how lands administered by ASLD are developed: Section 402, or the National Pollutant Discharge Elimination System ("NPDES") program, *id.* at §1342, which applies to pollutant discharges (other than dredge and fill) to regulated waters and is administered by the EPA, and Section 404, which requires a permit discharge or "dredge or fill material" (a type of pollutant by law, but generally composed of locally available dirt, concrete and steel) into regulated waters and is administered by the Corps with EPA

oversight. *Id.* at §§ 1344.[2] The Section 404 permit, which is essentially a construction permit regulating land development, has proven to be the most burdensome and complicated permit requirement faced by us. Before explaining the challenges we have faced with the permit program, it is helpful to understand ASLD's role as a landowner, and the constitutional and statutory limitations under which we operate.

Arizona State Trust Lands

ASLD, like its sister agencies in other states in the West, is in a unique position among land owners in that it is a state agency which functions as the Trustee of lands deeded to the State of Arizona at Statehood by the Federal Government in trust for public institutions in the State, including our K-12 system, and state universities.

The United States Congress, to encourage and support an expanding nation, entrusted the new territories and states with millions of acres of land to be managed specifically to provide funding for public education and other state institutions. Beginning in 1850 through 1912, when Arizona joined the Union, Congress granted in trust to the State of Arizona approximately 10,790,000 acres of land to support the designated public purposes, including devoting sections 2, 16, 32, and 36 in each township to the common schools (K-12).

The Arizona Legislature created the Arizona State Land Department in 1915 and designated the State Land Commissioner to manage the land in the best interest of the beneficiaries and to maximize long-term revenue to the trust. All uses of the land must benefit the trust, distinguishing its use from that of public land, such as state parks or national forests. Not only did Congress grant the lands in trust, but Congress also placed specific restrictions on transactions, including requiring sale and long-term lease of trust land at public auction for no less than appraised true value.

In this role, ASLD manages over 9.2 million acres of Trust land and as such represents the largest single non-federal landowner in the State. The lands involved were transferred to the State of Arizona when Arizona was admitted as a State pursuant to the Arizona-New Mexico Enabling Act (the "Enabling Act"). ASLD accordingly is constrained by statutory and constitutional mandates which do not affect other land owners. The mandates include the Enabling Act, the Arizona Constitution, and Title 37 of the Arizona Revised Statutes, the latter two of which are intended to implement the Enabling Act restrictions. The overarching obligation imposed on ASLD is to manage State Trust lands for their "highest and best use" and to maximize the return to its respective public beneficiaries.

In exercising this obligation, ASLD is subject to a number of constraints. Probably the most obvious is that ASLD must deal with the Trust lands given to it. It is not free to look at the open market for land, but instead must try to maximize the revenues it can obtain from the specific lands given to it under the Enabling Act. Further, under the way the Trust was set up, each piece of Trust land has specific beneficiaries (i.e. different school districts, universities, etc.), so that it

[2] Both the 404 and NPDES programs allow for states to assume authority to issue permits under those programs; virtually all states have done so under the NPDES program while only two -- New Jersey and Michigan – have assumed the 404 program.

is not generally permissible under the ASLD's trust obligations to give up rights on one piece of Trust land for the benefit of another piece of Trust land. As a result, the ASLD generally has less flexibility and financial room to maneuver than other land-owners.

"Navigable waters" on State Trust Lands, and the Desert Ridge 404 Permits

While one might think that "navigable waters" as defined by the Clean Water Act would be a rare feature in the Arid West, the reverse has been the case. The Clean Water Act defines "navigable waters" as "waters of the United States". 33 U.S.C. §502(7). EPA and the Corps adopted a regulatory definition of "waters of the United States that includes essentially any wetlands or surface water which affects interstate commerce. 33 C.F.R. § 328.3(a). The most controversial types of waters nationally are wetlands, but other types of waters are included too such as lakes, rivers, streams (including intermittent streams), playa lakes or natural ponds, and impoundments and tributaries of waters otherwise defined as waters of the U.S. *Id*. The validity of this rule has been called into question twice by the U.S. Supreme Court and no longer includes isolated waters or "non-relatively permanent waters" that have no "significant nexus" to "traditional" navigable waters. *See Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,* 531 U.S. 675 (2001)("*SWANCC*"); *Rapanos v. U.S.,* 126 S. Ct. 2208 (2006); "CWA Guidance to Implement the U.S. Supreme Court Decision for the *Rapanos* and *Carabell* Cases" (2008).

For State Trust lands in Arizona, the most common category of "waters" encountered are dry washes or arroyos. These features are drainage areas with "ephemeral" flow, i.e., they flow only in direct response to rainfall and are otherwise dry the vast majority of the year. They have been regulated in the past under the Section 404 permit program because they were deemed to be "tributaries" of "navigable waters" and therefore considered to have a sufficient connection to interstate commerce to regulate them at the federal level. The presumption was that all ephemeral washes were regulated, and that the burden of proof fell on the land owner to show that such ephemeral flows were isolated waters rather than tributaries with a significant nexus to navigable waters, a very costly enterprise.

Drainage features such as this are ubiquitous across the landscape in desert areas. They are particularly problematic where "alluvial fans" form. These drainage features found on thousands of acres of State Trust land are areas where high velocity flows coming off mountain ranges create unstable channels that shift and change with major storm events. The fans can form a weblike network of channels that make development challenging without major construction improvements. A notable problem with such alluvial systems is that many of the channels result from major storm events that occur only on a 20, 50 or 100 year basis. However, because of how these ephemeral channels form it is difficult to assess which channels represent ordinary path of rainfall versus isolated waters from infrequent storms that are outside of the rule. At present, ASLD is actively engaged in entitlement or marketing on at least three major project areas with active alluvial fan systems. The rule, as it stands, interjects risk and ambiguity into each of these efforts.

One of the major challenges we face is determining the limit of these washes. Under Corps regulations, the limit of jurisdiction for tributaries is the "ordinary high water mark" ("OHWM"), which is defined as "that line on the shore established by the fluctuations of water and indicated by physical 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, or other appropriate means that consider the characteristics of the surrounding areas." 33 C.F.R. § 328.3(e). This definition is borrowed from the Rivers and Harbors Act and describes the lateral limit of perennial streams, where the near constant presence of water forms a clear line on the bank. In ephemeral systems, which are characterized by a lack of water and generally have very "flashy" flows, a clear OHWM like that seen on perennial systems does not exist. Nevertheless, the Corps and EPA use the presence or absence of an OHWM as both the lateral limit of jurisdiction and the upstream limit of jurisdiction, i.e., Clean Water Act jurisdiction extends upstream until the OHWM is no longer "perceptible". At the top of the watershed this is a very difficult determination, with no clear beginning or end of federal regulatory control. In practice, prior to *Rapanos*, the Corps generally considered dry washes as small as two to three feet in width to be jurisdictional. Even post *Rapanos*, the availability of hydrologic data is uncertain, and the cost of obtaining and analyzing that data is significant, and represents a significant burden to moving potential projects forward. Often a project will face a cost-benefit decision on whether to cede jurisdiction to expedite a project even where there is clear evidence suggesting that a significant nexus may not exist. The alternative, pursuing studies that demonstrate a lack of jurisdiction, is very time consuming, and uncertain, especially given the ambiguity of the Rule.

ASLD has direct experience with such permitting standards, as it has three existing permits in an urban area of North Phoenix under which very small ephemeral washes were designated as Waters of the US. Under those permits, which cover an alluvial fan system known as the Rawhide Wash watershed, ASLD was subject to 6-1 on-site mitigation in the form of protected wash corridors. The resulting mitigation areas present significant challenges to land use and infrastructure. Implementation of guidance issued after the *Rapanos* decision has led to some regulatory relief. Many of the washes lack the "significant nexus" to downstream traditional navigable waters that would justify federal regulation under the *Rapanos* decision. The challenge has been demonstrating this lack of nexus to the satisfaction of the Corps. Obtaining a determination on large land holdings such as State Trust lands is a challenge to efficient and timely development of land held by ASLD, impacting the ability of ASLD to obtain maximum return to the Trust. Many smaller landowners elect to concede jurisdiction, even where a lack of jurisdiction seems clear, to avoid the long wait and therefore risk associated with pursuing a finding of no significant nexus. However, for a seller such as ASLD, finding a buyer for a large tract of land is difficult where 404 issues are not resolved prior to a sale. When a buyer is found, it is generally at a price significantly discounted from what fair market value would have been without 404 risk.

To illustrate the impact of 404 on the Trust, we can look to ASLD's prime current inventory. The Trust owns approximately 12,791 acres in three master planned areas in urban North Phoenix called Desert Ridge, Paradise Ridge and Azara. ASLD obtained a 404 Permit for each of these areas in the early-to-mid 2000s. The graphics in Appendix 1 and Appendix 2 illustrate this land area, where mountain ranges direct storm water discharge through a wide area – a classic alluvial fan watershed. In this case, there is no source of water other than rain, so in the Phoenix climate this watershed is rarely active.

In the early 2000s the master planned area of Desert Ridge was in the process of development, and a number of projects in the master plan were in the pipeline. The Army Corps had processed the first three or four of these projects under so-called Nationwide Permits. At some point there was a change in approach by the Corps, and ASLD was informed that further work

would require an Individual Permit for the remainder of the Desert Ridge area. As market demand was extremely high, ASLD proceeded to apply for a permit. The result serves as a cautionary tale, both for ASLD and for those who study the impacts of the Section 404.

The first, and primary problem with these permit areas is the rationale for inclusion under Section 404 regulation. The watershed is driven only by storm water runoff, and flows are very infrequent owing to the arid desert climate. The nearest traditional navigable body of water is approximately 90 miles away, as water flows. See **Appendix 3**. The watershed is also interrupted by several freeways, the Central Arizona Project canal (which is protected by a dyke system to prevent water damage to the canal system) and almost the entirety of urban Phoenix. All of these interruptions detain flows, and suggest a lack of physical connection between the subject watershed and traditional navigable waters. ASLD might have challenged jurisdiction based on these factors, but the permits predated *Rapanos*, and there was a lack of hydrologic data at the time to fully support possible arguments. A recent flood control study of the watershed revealed flow data that helped convince ASLD to reexamine these permit areas. (See flow data in Appendix 1.) The resulting study, completed earlier this year, concludes that this watershed has no physical connection to traditional navigable waters, much less an effect on the biological, chemical or physical traits of such water that would be required for jurisdiction under *Rapanos*. However, many landowners in this area have pursued 404 permits, and may continue pursuing 404 permits, as the ambiguity in the rule, and the high cost of a significant nexus analysis, make it difficult to proceed with often time-sensitive developments.

Second, because of the alluvial fan system, there are many existing storm runoff channels in the permitted areas. Without flow data, it is difficult to assess potential chemical, biological or physical effects on downstream waters. In many cases, assuming a physical connection to regulated water exists, the difficulty will lie in determining which channels are jurisdictional, and which are not. In the case of the Desert Ridge areas, a lack of flow data contributed to over designation when the original permits were obtained. ASLD's 2017 study showed that even if you assumed a physical connection, the jurisdictional delineation for these permit areas were over-designated by 50% or more. Some of this is likely the result of techniques, as our 2017 effort allocated significant resources for ground truthing, whereas the earlier efforts relied almost exclusively on conclusions drawn from aerial photographs.

Third, a major cost associated with the permits are the mitigation requirements. The three 404 Permits required on-site mitigation amounting to approximately 12% of the total land mass, or 1,685 of the total 12,791 acres within Desert Ridge, Paradise Ridge and Azara. Not only is there a loss of usable land associated with the corridors themselves, there is also a substantial loss in land attributable to the configuration challenges presented by the on-site mitigation corridors, and their effect on land planning. As a result, the effective mitigation requirement is likely 20% or more in these permit areas. See **Appendix 4** as illustrative of this problem. The various intersections and paths of these on-site mitigation corridors, which were required to follow existing washes, were often incompatible with efficient and economical land planning, and caused a greater loss of net-usable land. Those same configuration problems also greatly compounded infrastructure cost.

Finally, another example of how the 404 permitting program is not germane to the arid southwest, and which relates to our mitigation requirements, is found in the "Permittee-

Responsible" or onsite mitigation that was originally the sole method of mitigation under our 404 permits. Under this requirement, a developer was required to plant new trees and landscape materials to replace those removed by development. The consequence, given the lack of water in the system, was that it required permittees to irrigate the wash corridors to provide for sufficient water to the planted materials in order to achieve the required 80% survival rate after three years. This attempt to create a riparian environment in the dry desert uplands, has required extensive irrigation (of dubious environmental benefit in the dry desert) and has failed in many cases, as these so-called washes simply lack the water to meet Corps objectives. Because of this record, the Corps recently modified our permits to allow developers to purchase off-site mitigation credits from In-Lieu Fee providers. However, the practical effect of this method is that developers are now paying $80,000 per acre in mitigation bank expenses to replace dry upland washes with dissimilar wetlands in other areas of the Arizona. See **Appendix 5**, an illustration of Desert Ridge wash versus In-Lieu Mitigation Bank area in Arizona.

Desert Ridge has slowly developed since 1993, under a number of 404 permits issued from the mid-nineties to the mid-2000s. Other projects in the same watershed have also been permitted during and after this period, with the most recent in 2015. See **Appendix 6**, which shows significant difference in outcome on land adjacent to Desert Ridge. The outcomes have been inconsistent, and to my knowledge, no project has been given a determination that the Corps lacked jurisdiction. Despite this fact, ASLD's 2017 study showed that this watershed has no physical connection to traditional navigable waters. Earlier this year ASLD submitted this study to the Army Corps, and is awaiting determination from the Corps on jurisdiction. We believe that it is the high cost of analysis, including difficulty in obtaining reliable data, and most importantly, the ambiguity that has persisted in the Rule over this period that has caused this difficulty.

Section 404 Permitting Requirements and State Trust Lands

Section 404 permit requirements, when they apply to development of State Trust land, substantially affect the value of that land and its developability. There are multiple challenges with permitting State Trust lands, and these challenges directly and appreciably impact the return to the Trust Beneficiaries.

The first challenge that ASLD faces is the need to resolve Section 404 permitting issues before offering land for auction. Section 404 permitting from inception to permit issuance, can take several years to complete, with substantial uncertainty about the nature and scope of allowable development under an issued permit. While in some cases ASLD sells land without addressing Section 404, in many instances a far higher price for the land can be obtained at public auction if ASLD has first obtained a determination from the Corps regarding whether waters of the US are present on site and, if so, obtaining a permit for development of the land. The regulatory process is time consuming and expensive, and ASLD often lacks the resources to obtain a permit (or a determination that a permit is not needed) in advance of public auction.

As to the permit process itself, the major regulatory obstacle is the requirement to conduct an alternatives analysis in order to secure a permit. Section 404 requires that a permit comply with environmental guidelines developed by EPA pursuant to Section 404(b)(1) of the Act. The central requirement of the guidelines is the requirement to evaluate alternatives to the proposed discharge and only permit the least environmentally damaging practicable alternative that accomplishes the

project purpose. 40 C.F.R. § 230.10(a). The guidelines further provide that "an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." *Id.* In practice, this requirement pushes applicants to avoid ephemeral washes as much as possible, especially as mitigation costs can greatly exceed land value on a par basis in certain areas. This avoidance requirement significantly impedes efficient land development, resulting in substantial loss in value and, ironically, encourages development of land as low density residential which some would characterize as "sprawl", but in any event results in much lower returns to the Trust.

The guidelines include an obligation to look at offsite alternatives to accomplishing the project purpose: "If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered." *Id.* This obligation is generally imposed on applicants when they "entered the market". The idea is that an applicant should avoid purchasing and trying to develop land that has significant aquatic resources. Since ASLD never "entered the market", but rather has a mandate to manage the lands given to it, this requirement makes no sense. If ASLD is forced to develop an alternative site, then the original site would not be developed and its value to the public education trusts marginalized.

The guidelines also require the applicant to evaluate locations to the proposed project that do not involve any discharge to jurisdictional waters. *Id.* As discussed above, complete avoidance is often impossible due to the ubiquitous nature of ephemeral washes on State Trust lands.

One of the most difficult aspects of the alternatives analysis requirement is setting the project purpose. In the context of permitting ephemeral washes, the project purpose used by the Corps tends to be more generic than the applicant's true purpose. For State Trust lands, ASLD's true purpose is in obtaining the highest and best use for the property and maximizing value to the Trust. The Corps, however, looks at the specific construction plans and then evaluates whether that type of project (industrial, residential, etc.) can be accomplished while avoiding as many washes as possible.

In the context of Desert Ridge, a pressing question is what is a project? As discussed, Desert Ridge began development through nationwide permits issued to individual development projects after sales by ASLD. This made sense, as ASLD did not plan Desert Ridge, and ASLD does not build any portion of development, from roads to buildings. At that time the Corps interpreted a "project" to be the entirety of the Desert Ridge master-planned area, as it was zoned and entitled by the City of Phoenix as a whole. However, the zoning plan was flexible, anticipated a 20-plus year buildout, and was dependent on other builders and developers to construct improvements. There were no construction plans to base a 404 permit on when ASLD was forced to obtain its Permits. Designing on-site mitigation for a permit without a clear idea of what future improvements and infrastructure would require is one reason why the Desert Ridge 404 experience has been so difficult.

A related problem was the Corps interpretation of project purpose. ASLD's Trust mission is to optimize revenue to Trust Beneficiaries. Generally, however, a project purpose will relate to an actual construction project, not a mission. As ASLD had no construction project to base its permit on, there was an inability to point to a project purpose upon which ASLD could satisfy

various mitigation alternatives analysis. This contributed to difficulties with the established on-site mitigation corridors, which have proven to be a significant burden to further development in the area based on increased infrastructure costs, and land planning inefficiencies.

Another significant regulatory obstacle is the need to comply with mitigation obligations imposed by the guidelines and Corps regulations. Broadly speaking, mitigation generally refers to efforts by the permit applicant to reduce or compensate for adverse environmental consequences of the proposed project. Agency policy speaks in terms of a mitigation "sequence" of avoidance, minimization and compensation. *See* Memorandum of Agreement between the Department of the Army and the Environmental Protection Agency Concerning The Determination of Mitigation Under the Clean Water Act Section 404 (b)(1) Guidelines (Feb. 6, 1990)("Mitigation MOA"). Basically, this means that in review of a permit application, the Corps must first ensure that jurisdictional waters are avoided to the maximum extent practicable. This is generally accomplished through the alternatives analysis requirement. Next, the impact of discharges that are allowed must be minimized. This can be done in a number of ways including ensuring that the material discharged will not cause a violation of water quality standards (*e.g.*, use clean fill), ensuring that operation of the construction project will be done in a manner that minimizes other discharges, and ensuring that the fill that is discharged is secured so that it does not wash away. *See generally* 40 C.F.R. Part 230 H. Finally, compensation is usually required for the loss of waters occasioned by the discharge. This is done to implement the general national policy of "no net loss" of aquatic functions and values, although it does not have to be accomplished on each and every application. 33 C.F.R. Part 332; 40 C.F.R. Part 230, Subpart J.

Compensatory mitigation is one of the most challenging parts of a 404 permit application for large projects. Compensating for lost functions and values is generally accomplished through one or a combination of: (a) *restoration* of degraded aquatic areas; (b) *enhancement* of existing aquatic areas (basically raising the functions of an area that is already aquatic but not degraded) (c) *establishment* (also called "creation) of new aquatic areas; and (d) preservation of existing resources. 33 C.F.R. §332(a)(2).[3] Each of these methods can be executed through three basic approaches which we list in order of preference (most preferred to least preferred): (a) purchase of credits in a mitigation bank (*i.e.,* a facility that has restored or created wetlands or other aquatic areas in advance); (b) payment of an in lieu fee to an entity that will use the money to restore or create wetlands or other aquatic resources; or (c) development and implementation of a "permittee-responsible" mitigation plan. That plan could be accomplished onsite or offsite (preferably within the same watershed) and could be in kind (addressing the same kind of aquatic resources impacted, which is preferred) or in some circumstances, out-of-kind (particularly of the resources that are being addressed through the plan are of higher function or value than the resources impacted.) *Id.,* §332(b).

These compensatory requirements adversely impact development on State Trust lands in a number of ways. First, as discussed above, the cost of mitigation is high and obviously directly impacts the value of land subject to mitigation requirements. Second, as of now, Arizona has no mitigation banks and relatively few in lieu fee projects. Therefore in many instances, permit applicants are required to develop their own mitigation plans. This has been done on State Trust

[3] There are parallel cites to the Corps compensatory mitigation regulations in the EPA 404(b)(1) Guidelines at 40 C.F.R. Part 230, Subpart J.

lands permitted by the Corps in the past, but has resulted in substantial land set asides that reduce overall land values and impose maintenance burdens on potential purchasers. Furthermore, development of permittee specific mitigation plans are a significant expense. All in all, compensatory mitigation significantly devalues land and is a difficult regulatory obligation to meet.

Primacy

The State of Arizona is currently investigating obtaining CWA Section 404 primacy. Program authorization for CWA § 404 will allow Arizona to improve permit processing time for customers, improve coordination between the dredge and fill permit program and the Arizona Section 402 permit program and increase certainty and consistency in WOTUS determinations, thus minimizing regulatory uncertainty for businesses. Even with these improvements, primacy does not offer relief for the concerns elaborated on above.

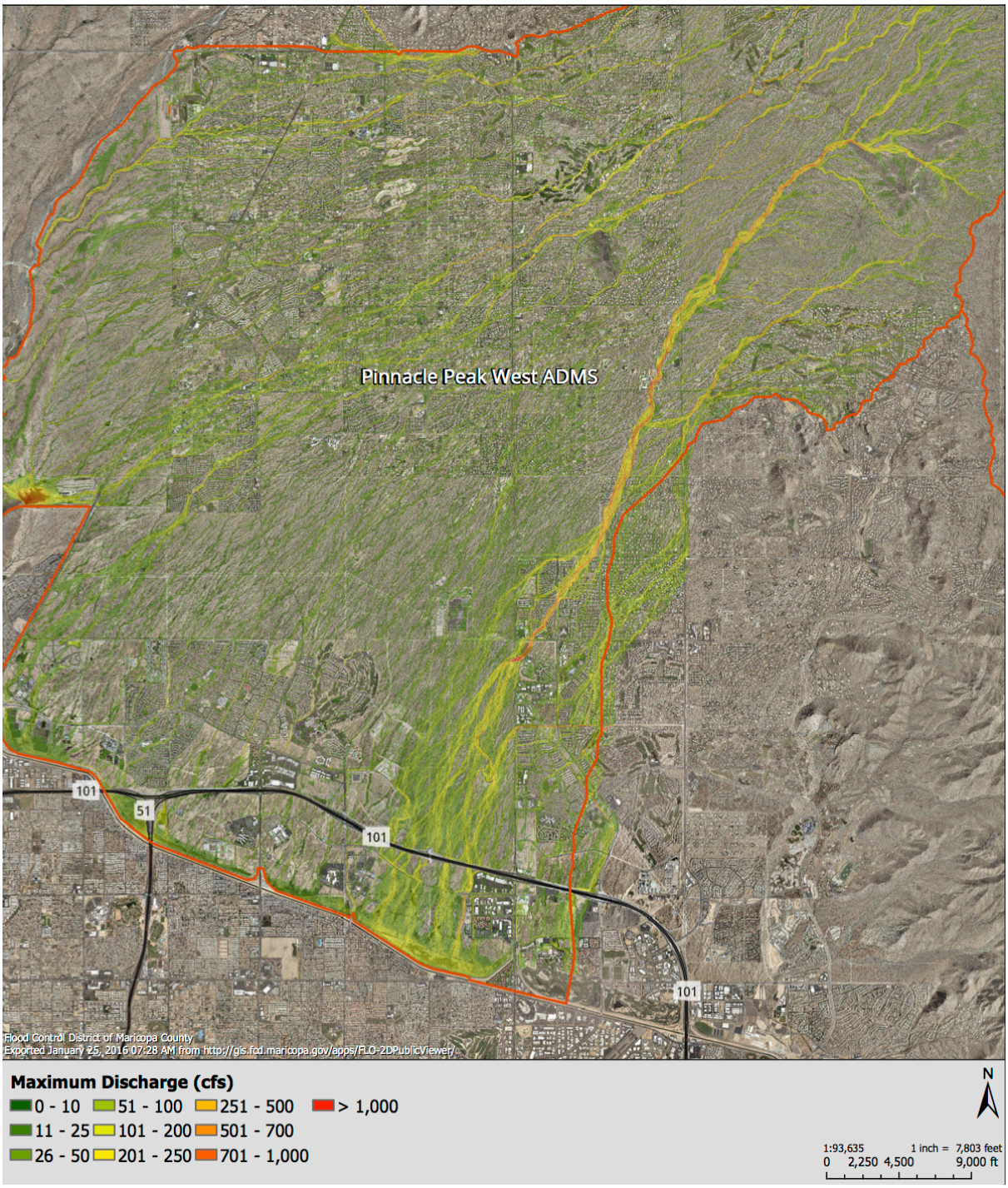
In ASLD's view, process improvement will continue to be difficult without substantial improvement in the Rule. However, primacy will give Arizona a say in how it prioritizes processing such permits, and will move regulatory control closer to the regulated community. A frustration with the current system is that the State has no control over a permitting process that can significantly affect economic development in the State. To ASLD this is not because of Corps staff, but is a result of divergent interests of the State and Federal governments. Desert Ridge is an illustration of how economic progress can stall, in part because of the 404 program. Assuming a clear 404 were to be put in place, primacy would allow Arizona to prioritize projects like Desert Ridge that are recognized to have a probable impact for the State.

Conclusion

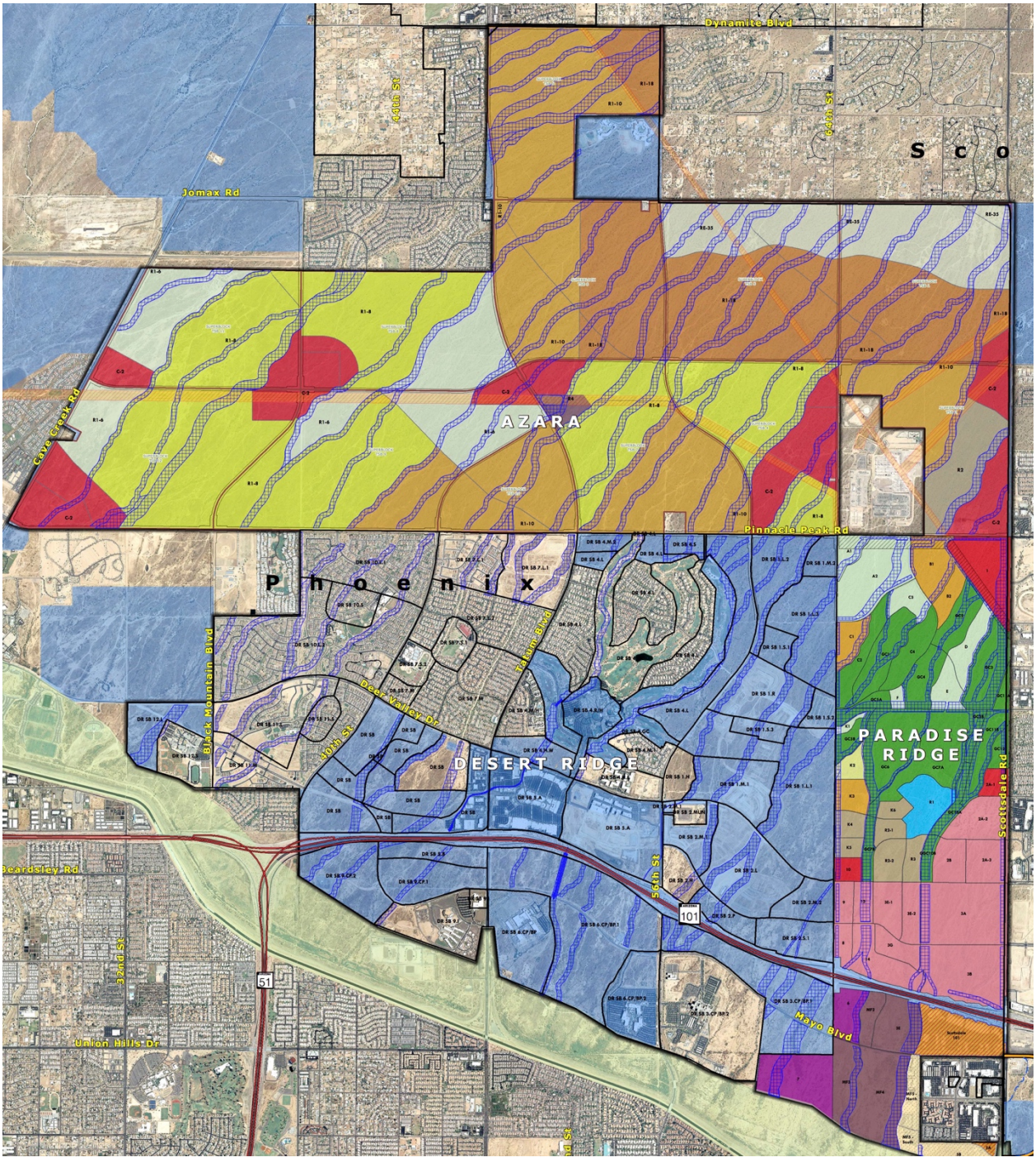
Section 404 permitting is a major regulatory consideration affecting the value of State Trust lands. The Desert Ridge area is an illustration of the effects of ambiguity in regulation under Section 404. Regulation of small ephemeral washes in particular, substantially diminish the value and marketability of State Trust lands, with little and oftentimes no discernable environmental benefit. ASLD supports protection and conservation of valuable aquatic resources in the State, but believes that extending Section 404 permitting requirements to small ephemeral washes imposes far too great a burden. In our view there would be tremendous benefit from a clear 404 rule that minimizes unknown risks, and gives proper consideration of the unique character of arid desert lands. While the guidance in *Rapanos* has improved the picture under existing regulation, the burden of significant nexus analysis often puts that benefit out of reach, and has a tremendous impact on project timelines. An improved and clear Rule would assist both the regulated community and the agencies involved in permitting.

Mr. Chairman and Members of the Committee, thank you for the opportunity to testify on behalf of Arizona and the Arizona State Land Department. I am happy to answer any questions that you might have, and pleased to provide any additional information you may require.

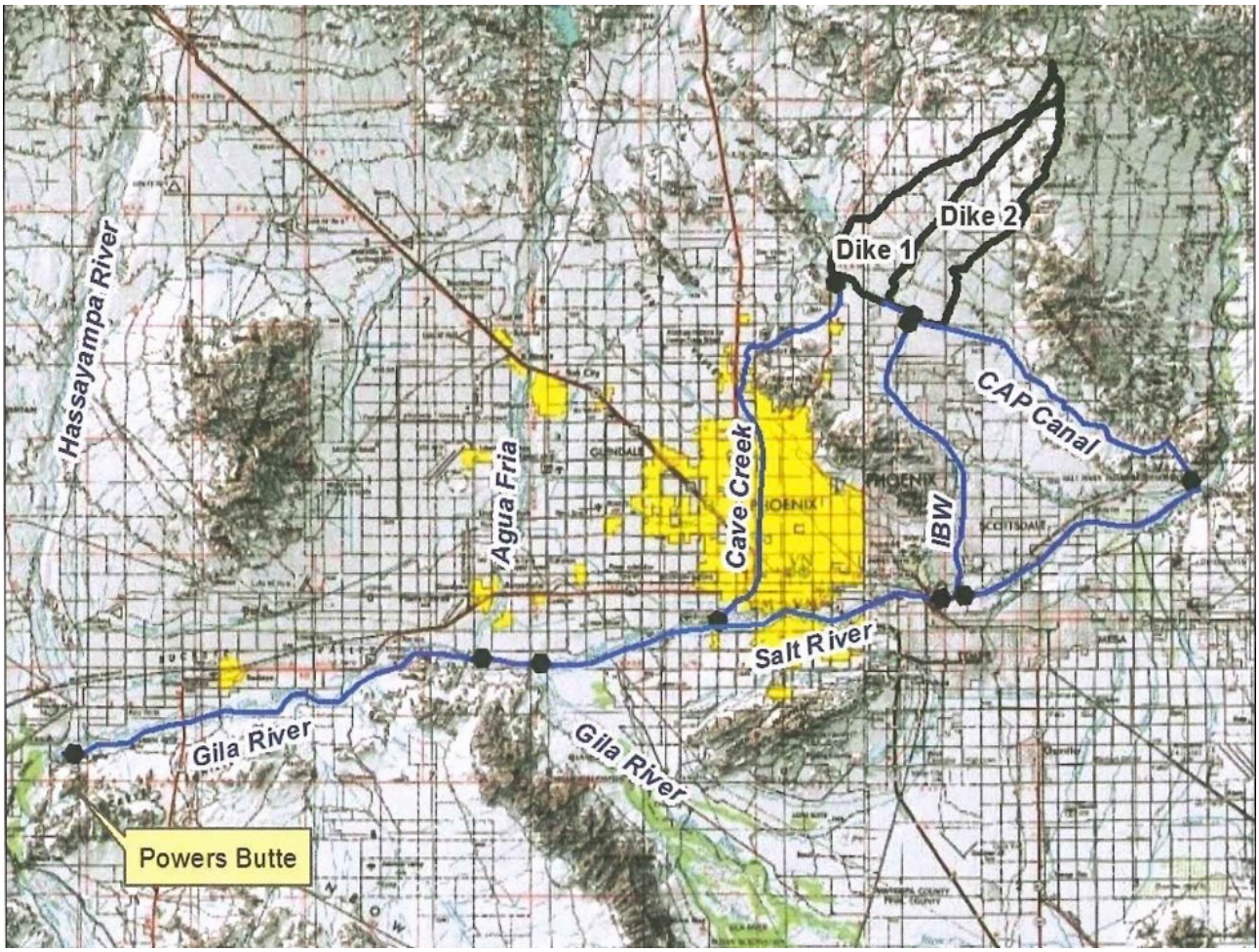
Appendix 1. This photo depicts maximum storm water flow rates from recent hydrologic studies on the Pinacle Peak West ADMS. This study, which was performed for flood control purposes, provided ASLD with data to pursue a significant nexus analysis of the Rawhide Wash Watershed in Desert Ridge, Paradise Ridge and Azara. As you can see, flow rates vary widely, and there are many minor discharges in this alluvial fan system, which present the most significant challenge for ASLD.



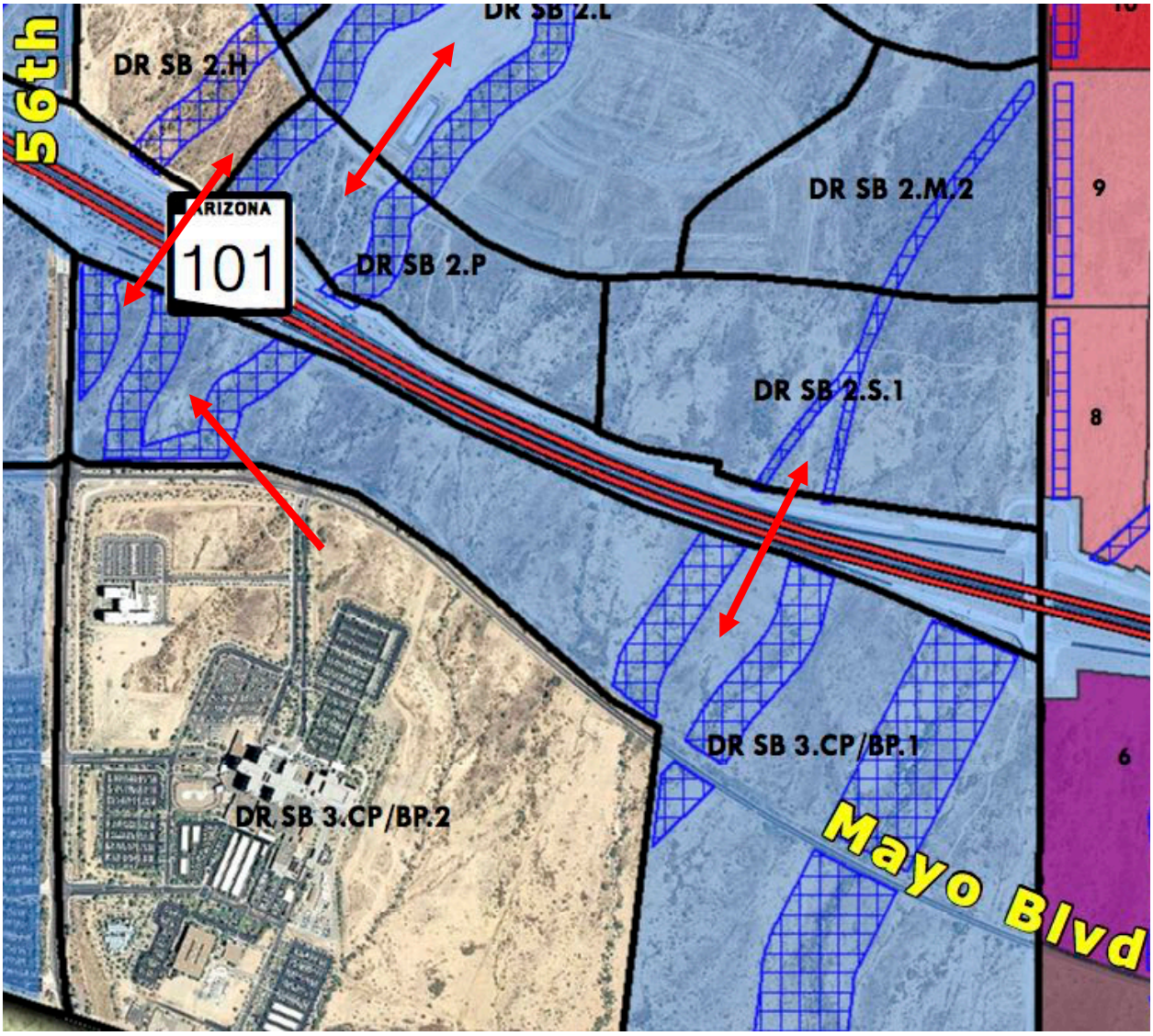
Appendix 2. This graphic depicts the on-site mitigation corridors required under the respective 404 permits for Desert Ridge, Paradise Ridge and Azara. The configuration of these corridors present tremendous obstacles for development in this urban area of North Phoenix, and have diminished the value of the underlying Trust land.



Appendix 3. This graphic illustrates the distance from the Desert Ridge (Rawhide) watershed to the nearest traditional navigable water (Powers Butte). The water is interrupted by the 101 Freeway, the CAP canal, and numerous gravel detention areas. ASLD's 2017 study concluded there is no physical connection between the Desert Ridge (Rawhide) watershed and any traditional navigable water.



Appendix 4. This graphic illustrates the configuration problems that are common with the Desert Ridge, Paradise Ridge and Azara 404 permits. The blue hatched areas are on-site mitigation corridors. The development on the bottom left of the graphic is the Mayo Hospital. A bio-science park has long been planned for adjacent land, but a number of factors have delayed progress, high among those, the very significant loss of land between the mitigation corridors. The Northeast corner of 56th Street and Mayo Boulevard should provide an ideal entry area for the bio-science campus, but is undevelopable as a result of the corridors. This is a sparse desert area, with very infrequent storm water runoff.



Appendix 5. These pictures show the difference between several representative washes in the ASLD permit areas in North Phoenix, and typical 404 in-lieu fee mitigation properties.

An example of an upland desert ephemeral wash in Desert Ridge.

A second example of an upland desert ephemeral wash in Desert Ridge.

An example of an existing 404 In-Lieu Fee Mitigation property in Arizona

Appendix 6. The graphic on the bottom left shows the jurisdictional delineations performed for permitting Desert Ridge, Paradise Ridge and Azara. The top left graphic shows a similar delineation made in 2006 as part of ASLD's permit work. The top right graphic shows the same piece of land, delineated in 2015 by a subsequent purchaser. The location of the land is shown by the red arrow, and is directly adjacent to Desert Ridge. Note the significant difference in outcome.