

SITING ENERGY AND TRANSMISSION LINE PROJECTS IN ARIZONA

An Irreverent Primer



2020 Edition

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Introduction.

With the coal era winding down and renewable energy sources rapidly growing, Arizona offers an attractive market for renewable energy facilities, with plenty of sunshine and even a bit of wind up north. And, despite what you may have heard about our, umm, colorful politics, historically Arizona has been largely supportive of renewable energy, at least with regard to utility-scale projects. Arizona also obviously offers proximity to large markets in California and Texas. That's the good news.

The less-good news is that the prevalence of federal and tribal lands can complicate efforts to site generating and transmission facilities, given the usual overlay of federal laws such as the National Environmental Policy Act ("NEPA"). That said, if your point of reference is California, you'll wonder why we think Arizona can be a challenge.

This brief primer—at various points *not* stupefyingly dull—provides an overview of the real-world siting process in Arizona. The first thing to know is that the Arizona Corporation Commission ("ACC" or "Commission") exercises jurisdiction over large thermal generating facilities and transmission lines, which must demonstrate compatibility with Arizona's natural, cultural, and economic environment. That demonstration, as described further below, involves a NEPA-like process with public comment and open hearings.

The Commission is an independent creature of the state constitution, created primarily because at the time of statehood in 1912 the populace did not trust the territorial legislature to regulate railroads and

utilities. The Commission is composed of five commissioners elected to staggered four-year terms in a state-wide ballot, three during presidential election years and two in even-numbered off-years. Bolstered by sophisticated staff, the Commission has generally avoided the negative scrutiny that has periodically fallen on other parts of Arizona government. The Commission's low profile ended in connection with the 2014 elections, when a pitched battle between rooftop solar advocates and electric utilities over net metering triggered a campaign finance flap that reverberates today, with the state's largest utility and one of the Commissioners litigating the power of a single commissioner to compel disclosure of indirect campaign contributions.¹

Six candidates, three Republicans and three Democrats, will be on the November 3, 2020 general election ballot.²

Only one of the candidates, Tucson businesswoman Lea Marquez Peterson, is an incumbent. Peterson, a public affairs professional and long-time head of the Tucson Hispanic Chamber of Commerce, was appointed in May 2019 to succeed Andy Tobin, who retired to become head of the Arizona Department of Administration. The other Republican candidates are small business owner and former Department of Gaming official Eric Sloan and write-in candidate Jim O'Connor, a finance professional.

The Democratic candidates are Anna Tovar, Bill Mundell, and Shea Stanfield. Tovar is a former state legislator and mayor of the west Phoenix suburb of Tolleson. Mundell, an attorney and former state legislator, was a commissioner from 1999-2009 and a principal author of Arizona 2006 renewable energy standards. Stanfield is a community activist in Cave Creek, northeast of Scottsdale.

In addition to Marquez Peterson, for the moment the current Commissioners, four Republicans and one Democrat,³ are Bob Burns, Boyd Dunn, Justin Olson, and Sandra Kennedy. Chairman Burns, who is term-limited and unable to seek re-election, had a lengthy battle with Arizona Public Service ("APS") over its 2014 campaign contributions. Commissioner Dunn is a retired Superior Court judge and former Chandler mayor. Like Chairman Burns, he likewise will not be on the ballot, after falling short of collecting the required nominating signatures.⁴ Commissioner Olson was appointed to the Commission by Governor Doug Ducey in October 2017 after serving in the Arizona House of Representatives from 2011 until 2017. Commissioner Kennedy is the lone Democrat on the ACC; she previously served in the Arizona House of Representatives and Arizona State Senate. She was first elected to the ACC in 2008, where she ran on a pro-solar platform.

Three seats are on the ballot in 2020; Sandra Kennedy won a seat in 2018 and is not up for re-election; Commissioner Olson is not on the ballot in 2020; and Chairman Burns, as noted above, is termed out.

While the Commission itself is sophisticated and well-run, the legal landscape can be a bit tricky. Less than 20% of the land within Arizona is privately held. Even if one can find a suitable private parcel to site a generating facility, any lengthy transmission line is likely to encounter some combination of federal

1 See <http://azcapitoltimes.com/news/2017/03/11/giant-utility-drops-lawsuit-against-acc-commissioner-to-stop-records-production/>. The Commission's normally placid approach to governance also fell by the wayside in connection with the quick death of a docket opened to evaluate the prospects for retail competition in Arizona. After heavy pressure from utilities and utility investors, the docket was abruptly closed in a manner that troubled Commissioner Burns, who had called for additional evidence to be submitted before any decision was taken. See *In the Matter of the Commission's Inquiry into Retail Electric Competition*, Docket No. E-00000W-13-0135, available at <http://edocket.azcc.gov>.

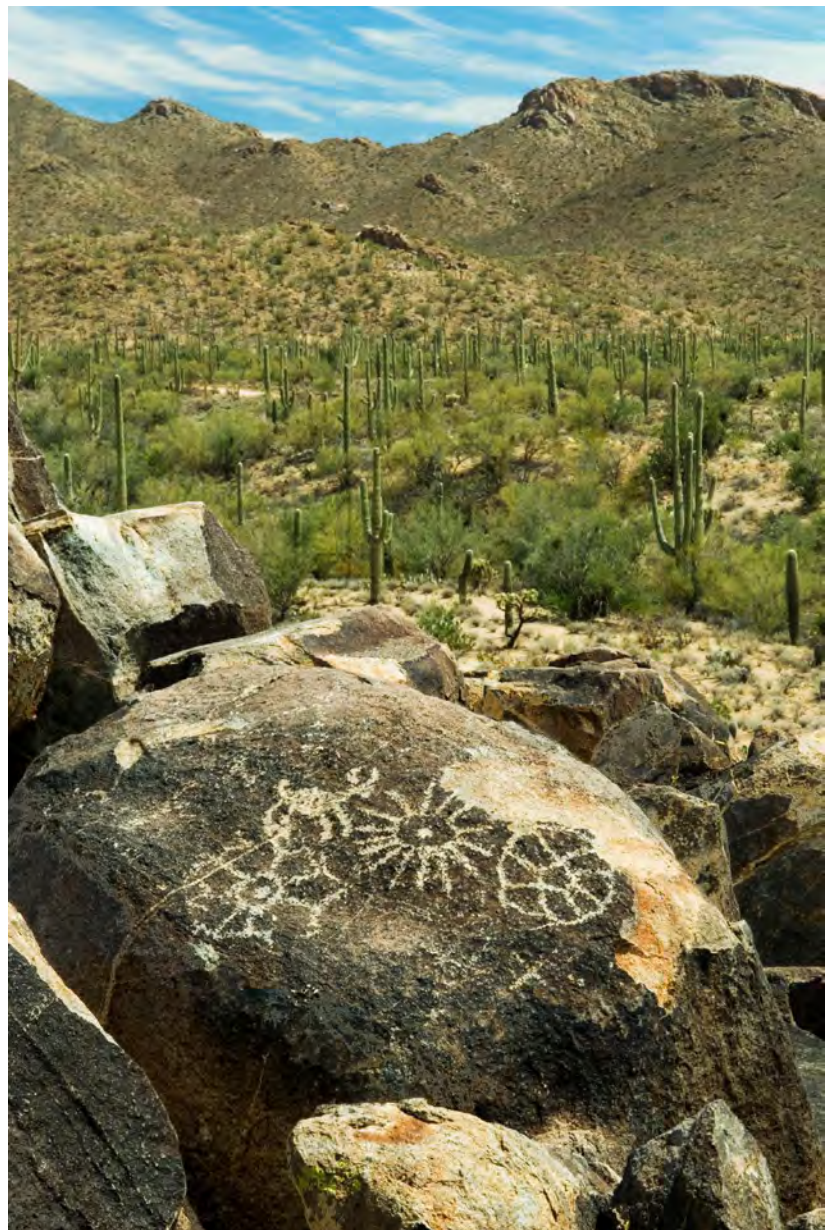
2 <https://apps.arizona.vote/electioninfo/elections/2020-primary-election/state/2440/17/0>.

3 Full biographies of the current commissioners, taken from the ACC web site, are attached in Appendix 1.

4 <https://azcapitoltimes.com/news/2020/05/01/boyd-dunn-removed-from-arizona-corporation-commission-ballot/>.

lands, tribal lands, and State Trust lands, many blessed with biological and cultural resources.⁵ The prevalence of federal and tribal lands, of course, makes Arizona projects relatively more likely to require some sort of federal approval that in turn mandates some level of NEPA review. Developers of Arizona projects spend a fair bit of time trying to avoid NEPA triggers. Also trickier in Arizona than in most places is recognizing a “water of the United States” whose disturbance requires a Clean Water Act dredge-and-fill permit. Arizona has more than its share of potentially jurisdictional waters that are normally not, well, wet. Although Arizona’s regulatory environment is generally favorable to energy development, the sheer diversity of the state’s cultural and natural environments poses many traps for the unwary.

5 Please see Appendix 3 for a map detailing surface management responsibilities in Arizona.



Petroglyphs in Tucson, Arizona



Sunrise in Kelvin, Arizona

2

The Arizona Market for Renewables.

Although it has been apparent for some time that Arizona is sunny and hot (see Figures 1 and 2) (it lags behind only Nevada for solar potential),⁶ renewable energy development in the state did not catch fire until the 2000s. In 2006, the Commission adopted a Renewable Energy Standard and Tariff (“REST”).⁷ The REST rules require regulated electric utilities to develop an energy portfolio that includes an increasing amount of solar and other “environmentally friendly” sources.⁸ Despite periodic efforts by the Arizona Legislature to give itself a role in setting renewable energy standards, the Commission has held exclusive authority since the Court of Appeals upheld the Commission’s REST in *Miller v. Corporation Commission*, 227 Az. 21, 251 P.2d 400 (Ct. App. 2011).⁹ The REST requires regulated utilities to source 15% of their retail kilowatt-hour sales from renewable sources by 2025, increasing by 1% each year from 2020’s target of 10%. Of that amount, 30% is required to be provided through distributed generation. The Commission is in the midst of considering adjusting the REST, with the proposals ranging from requiring

6 <https://www.eia.gov/state/analysis.php?sid=AZ#44>.

7 Decision No. 69127, *In the Matter of the Proposed Rulemaking for the Renewable Energy Standard and Tariff Rules*, Docket No. RE-00000C-05-0030 (Nov. 14, 2006), available at <http://www.azcc.gov/divisions/utilities/electric/res.pdf>.

8 Ariz. Admin. Code (“A.A.C.”) R14-2-1801 to -1816, available at http://www.azsos.gov/public_services/Title_14/14-02.htm.

9 But stay tuned: those who support the Arizona Legislature playing a role in setting renewable standards got a boost from the Arizona Supreme Court in July. The Court strongly suggested that the Legislature has concurrent authority in the renewable standards area in dicta addressing the Commission’s unrelated authority to displace management of a regulated water and wastewater authority in *Johnson Utilities, L.L.C. v. Arizona Corporation Commission*, 2020 WL 4379430 (Ariz. July 31, 2020).

Concentrating Solar Power Prospects of Arizona

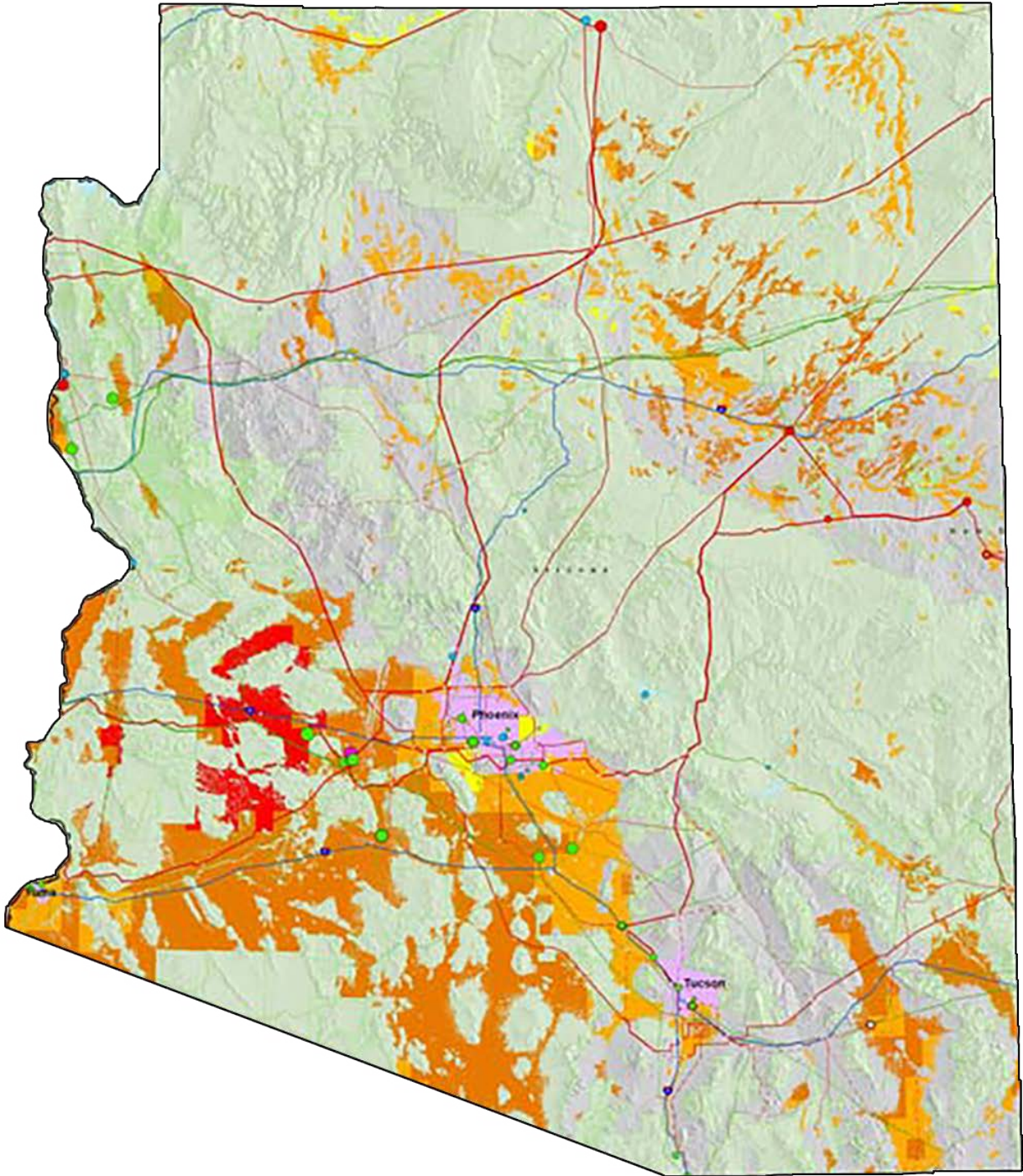


Figure 1. Arizona Solar Resources. While the entire state is sunny, these areas are extra sunny, flat, and not environmentally sensitive.

Source: <https://azsolarcenter.org/images/articles/az/azcsp2.jpg>

Arizona - Annual Average Wind Speed at 80 m

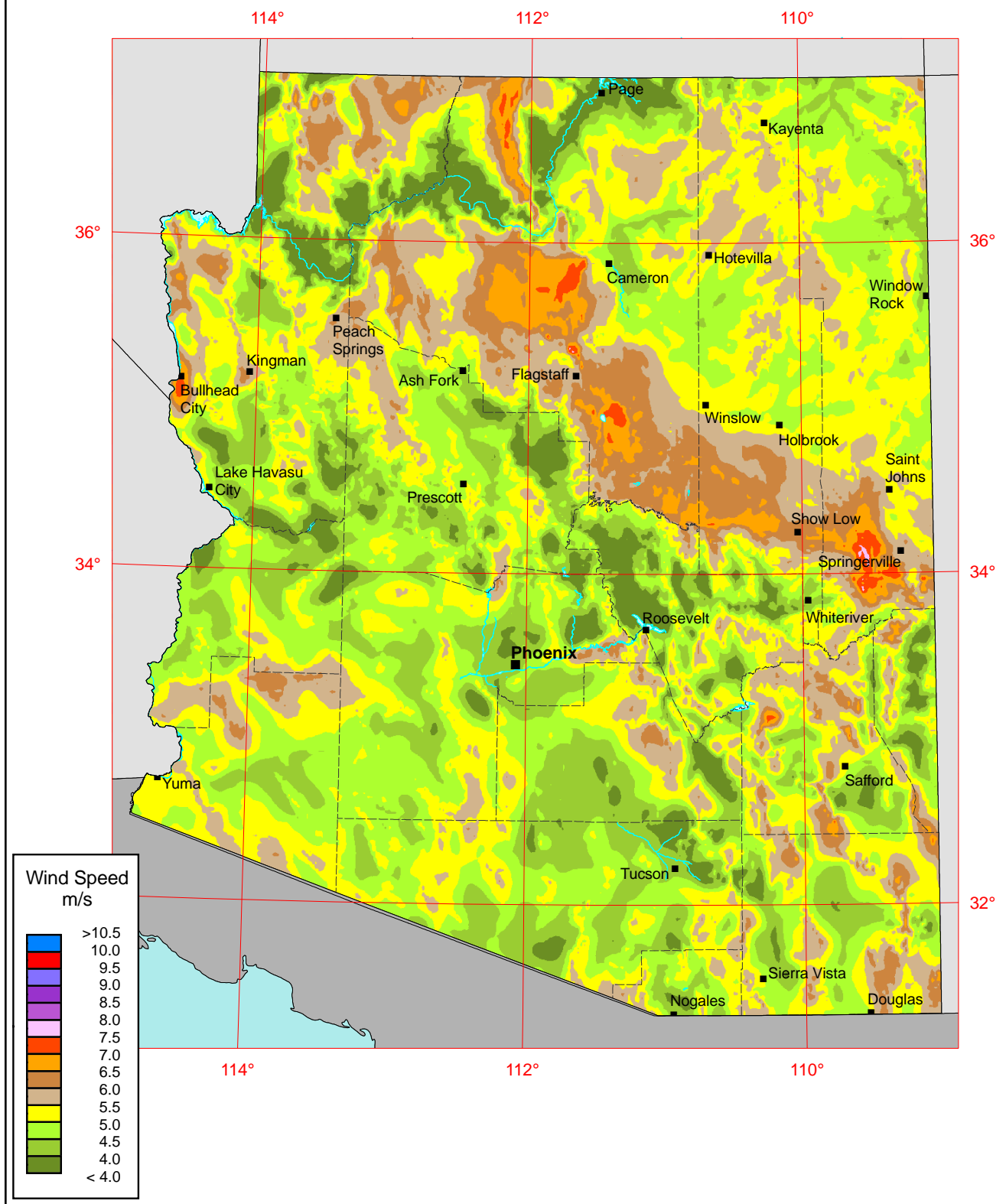


Figure 2. Arizona Wind Resources. Prime wind resources correspond with Arizona's mountain ranges, running from the northwest corner down to the southeast.

Source: <https://windexchange.energy.gov/maps-data/9>

50% renewable sourcing by 2030 to 100% by 2050, among others.¹⁰

Renewable energy provided around 13% of Arizona's net electricity generation as of 2018.¹¹ While hydroelectric power was dominant for a long time, by 2018 solar power accounted for almost 7% of Arizona's net electricity generation.¹² A variety of entities—from power companies to consumers to tribes—have fueled this trend. For example, in 2017, the Kayenta Solar Facility, which was the first large-scale photovoltaic ("PV") solar facility on the Navajo Nation, came online; it has 27 megawatts ("MW") of capacity.¹³ Additionally, in 2019 the U.S. Department of Energy awarded a grant to the Aha Macav Power Service, authorized by the Fort Mojave Indian Tribe, to develop a PV array to deliver 2.3 MW of power.¹⁴

Arizona also exports a significant amount of power. In 2018, Arizona supplied about a quarter of its net generation to consumers outside the state.¹⁵ Current projects such as the Ten West Link, a proposed 500-kilovolt ("kV") transmission connection between Tonopah, Arizona, and Blythe, California, aim to improve system efficiency and energy transfers between Arizona and neighboring states.¹⁶



Wind Turbines

The dominant players in the Arizona utility market are APS, Tucson Electric Power ("TEP"), and the Salt River Project ("SRP"). Maps of each utility's service area and of the overall transmission infrastructure can be found in Appendix 4.

SRP is an umbrella acronym term that refers to two independent entities. The Salt River Valley Water Users' Association is an association of landowners that was formed to manage and distribute water from the SRP, a federal reclamation project authorized in 1903 in accordance with the National Reclamation Act. The Association is one of Arizona's largest suppliers of raw water, mostly in the Phoenix area. SRP also operates a series of reservoirs, canals, and dams.¹⁷

SRP's power operations are conducted via the Salt River Project Agricultural Improvement and Power District, formed in 1937 as a political subdivision of the State of Arizona. SRP provides electricity to more than 1 million customers, mostly in the Phoenix area. As of the summer of 2019, SRP's generating capacity was 8,104 MW, with another 1,533 MW of purchased power. Of this, 693 MW came from

¹⁰ See Rulemaking Docket RU-00000A-18-0284 at www.azcc.gov.

¹¹ Arizona State Profile and Energy Estimates, available at <https://www.eia.gov/state/analysis.php?sid=AZ#41>.

¹² *Id.*

¹³ Navajo Celebrate First Large-Scale Solar Farm on Nation, Navajo-Hopi Observer, September 5, 2017, available at <https://www.nhnews.com/news/2017/sep/05/navajo-celebrate-first-large-scale-solar-farm-nati/>.

¹⁴ DOE Announces \$16 Million for 14 Tribal Energy Infrastructure Deployment Projects (July 23, 2019), available at <https://www.energy.gov/articles/doe-announces-16-million-14-tribal-energy-infrastructure-deployment-projects>.

¹⁵ Arizona State Profile and Energy Estimates, <https://www.eia.gov/state/analysis.php?sid=AZ#44>.

¹⁶ Ten West Link Project Information, available at <https://www.tenwestlink.com/project-info.html>.

¹⁷ <http://www.srpnet.com/about/facts.aspx>.

renewable resources/purchases, 4,474 MW was derived from gas, 688 MW was nuclear, and 2,673 MW was from coal (an additional 1,109 was derived from other/purchased sources).¹⁸ SRP, which likes to keep everyone confused about what sort of legal creature it is, is not technically subject to ACC regulation. However, SRP has long pursued renewable energy sources, and its board has adopted a policy of sourcing 20% of its power from renewable sources by 2020. As of the close of SRP's 2019 fiscal year, SRP is currently on schedule to meet the goal by delivering 18.625% of retail requirements through sustainable resources, including renewable energy, hydropower, energy efficiency programs, and banked credits.¹⁹

APS, a subsidiary of Pinnacle West Capital Corporation, is Arizona's largest and oldest public utility. APS serves more than 1.2 million retail and residential customers, serving 11 of Arizona's 15 counties. Palo Verde, with a capacity of 4,000 MW, is the nation's largest power plant. 2019 data from APS shows 10,609 MW of capacity from existing resources.²⁰ APS gains nearly half of its electricity from gas-fired generation, with 22 percent from nuclear and 18 percent from coal. Hydropower and solar provide most of the remaining 10 percent.²¹ In 2020, APS announced its "decarbonization goal" to achieve 100% carbon-free electricity by 2050, with 65% carbon-free by 2030.²²

TEP, an indirect subsidiary of Fortis, Canada's largest investor-owned gas and electric utility holding company, is the state's second-largest investor-owned utility, serving more than 417,000 customers in the Tucson area. TEP currently provides 551 MW AC from its renewable portfolio, and plans to add 450 MW of new renewable capacity by 2021. This would increase its total renewable portfolio to more than 1,000 MW--about 28 percent of its total annual generating capacity.²³

Arizona's dominant utilities (APS, SRP, TEP), along with other utilities, electrical cooperatives, transmission regulators/governmental agencies, transmission facility owners and users, and others across the state and region, are part of a regional transmission planning group known as the Southwest Area Transmission ("SWAT") Subregional Planning Group. The SWAT meets quarterly to promote and coordinate regional transmission planning in the Southwest. A SWAT map of major regional transmission and generation infrastructure can be found in Appendix 4 along with maps of APS, SRP, and TEP service areas and transmission infrastructure.

18 https://www.azcc.gov/docs/default-source/utilities-files/electric/summer-preparedness/2019/srp-summer-preparedness_2019.pdf?s-fvrsn=5f520413_4.

19 <https://srpnet.com/environment/sustainability/portfolio-2020-goals.aspx>.

20 <https://www.aps.com/-/media/APS/APSCOM-PDFs/About/Our-Company/Doing-business-with-us/Resource-Planning-and-Management/2019PreliminaryIRP.ashx?la=en&hash=B92BD81FFA365C6EFBF05F0D4E75B4BB>.

21 <https://www.renewableenergyworld.com/2020/01/22/arizona-public-service-using-solar-storage-nuclear-to-reach-100-percent-carbon-free-energy-by-2050/#gref>.

22 <https://www.aps.com/en/About/Our-Company/Newsroom/Articles/APS-and-Advanced-Energy-Economy-announce-Arizona-Clean-Energy-Future-Project>.

23 <https://www.tep.com/renewable-resources-2/>.



Bobcat Kitten in Northern Arizona

3

The Arizona Certificate of Environmental Compatibility.

Commission Background.

Among other things, the ACC has jurisdiction over “public service corporations”²⁴ engaged in the transmission of power and electricity.²⁵ The Commission is comprised of five popularly elected members who may serve no more than two consecutive four-year terms.²⁶ Arizona is one of only 13 states with elected, rather than appointed, commissioners. By statute, proponents of thermal generating plants with a nameplate rating of 100 MW or more and aboveground transmission lines designed for 115 kV or higher²⁷ are required to obtain a Certificate of Environmental Compatibility (“CEC”) from the Commission. Smaller-scale solar thermal plants, PV plants, and wind projects do not require a CEC, but a CEC may be required for interconnection or other related transmission lines.

²⁴ Ariz. Const. art. 15, § 2 (“All corporations other than municipal engaged in furnishing gas, oil, or electricity for light, fuel, or power; or in furnishing water for irrigation, fire protection, or other public purposes; or in furnishing, for profit, hot or cold air or steam for heating or cooling purposes; or engaged in collecting, transporting, treating, purifying and disposing of sewage through a system, for profit; or in transmitting messages or furnishing public telegraph or telephone service, and all corporations other than municipal, operating as common carriers, shall be deemed public service corporations.”).

²⁵ Ariz. Const., art. 15.

²⁶ Ariz. Const., art. 15, § 1(B).

²⁷ Ariz. Revised Statute (“A.R.S.”) § 40-360(9).

Obtaining a CEC requires a demonstration that a project will “balance in the broad public interest, the need for an adequate, economical and reliable supply of electric power with the desire to minimize the effect thereof on the environment and economy of the state.”²⁸

CEC applications are initially evaluated by the Arizona Power Plant and Transmission Line Siting Committee,²⁹ a creature of statute.³⁰ The Committee process typically concludes with a multi-day hearing, sort of a cross between a bench trial and a legislative hearing, at which testimony is taken, cross-examination is conducted, and intervenors and members of the public are allowed to speak. The Committee members by law come from diverse backgrounds. The current chairman is Tom Chenal, a well-regarded assistant attorney general who serves as chief counsel for public advocacy.³¹

Criteria and Potential “Reasonable Conditions.”

After holding public hearings and considering a host of factors codified in Arizona Revised Statute (“A.R.S.”) § 40-360.06, the Committee makes a recommendation to the Commission regarding the CEC. Arizona law directs the Committee to consider the following factors:

- Existing development plans at or in the vicinity of the site
- Fish, wildlife, and plant life
- Noise emission levels and interference with communication signals
- Proposed availability of the site to the public for recreation purposes
- Existing scenic areas, historic sites and structures, or archaeological sites
- The area’s total environment
- The technical practicability of achieving the proposed objective and the previous experience with equipment and methods available for achieving the proposed objective
- Costs, including potential increase in the cost of electric energy for consumers
- Additional factors applicable under state or federal law governing the site³²
- Special consideration of the protection of areas unique because of biological wealth or their status as habitats for rare or endangered species³³
- Compliance with all air and water pollution control standards and regulations³⁴
- Compliance with local zoning under all applicable jurisdictions³⁵

The Committee typically recommends, and the Commission endorses, a variety of “reasonable conditions.”³⁶ For example, in a decision awarding a CEC to Perrin Ranch Wind for transmission lines and substations, the Commission imposed 22 conditions, including the following:

28 *Id.* § 40-360.07(B).

29 The Arizona Legislature created the Committee to provide a single forum for the expeditious resolution of all matters concerning the location of electric-generating plants and transmission lines in a single proceeding to which access is open to interested and affected individuals, groups, county and municipal governments and other public bodies, enabling their participation in these decisions. Historical Notes, Laws 1971, Ch. 67, § 1.

30 A.R.S. §§ 40-360 to 40-360.13.

31 The other committee members are described in Appendix 2.

32 A.R.S. § 40-360.06(A)(1)-(9).

33 *Id.* § 40-360.06(B).

34 *Id.* § 40-360.06(C).

35 *Id.* § 40-360.06(D).

36 *Id.* § 40-360.06(A).

- Compliance with all existing applicable ordinances, master plans, and regulations of state and county entities, and federal law
- Compliance with federal environmental law and Arizona special species statutes
- Compliance with instructions from the Arizona State Land Department regarding the treatment of sites listed in the State Register of Historic Places
- Work stoppage upon the uncovering of human remains or funerary objects pending consultation with the Director of the Arizona State Museum
- Notification and consultation with the Director of the Arizona State Museum if any archaeological, paleontological, or historical site or object older than 50 years is discovered on state, county, or municipal land
- Undertake construction activities consistent with the Arizona Native Plant Law
- Provide copies of CEC to appropriate local and state governments and regulatory agencies
- Provide notice of the project to neighboring land and homeowners³⁷



Burrowing Owl

Getting Started on Your CEC.

Arizona law requires that “[e]very person contemplating construction of any plant within the state shall file a plan with the Commission ninety days before filing an application for a certificate of environmental compatibility.”³⁸ The filed “plan” should include, to the extent such information is available, the following:

- The size and location of each plant proposed to be constructed
- The purpose to be served by each plant
- The estimated date by which each plant will be in operation
- The average and maximum power output measured in megawatts of each plant to be installed
- The expected capacity factor for each proposed plant
- The type of fuel to be used for each proposed plant
- A power flow and stability analysis report showing the effect on the current Arizona Electric Transmission System³⁹

Before filing a plan, however, one should and sometimes must have a pre-filing meeting with the Committee, which generally takes place with Chairman Chenal at the Attorney General’s Office. Parties are likewise free to discuss potential filings with members of the Commission and staff. After the application is filed, however, *ex parte* contact on substantive matters with the Commissioners, their staff, and Committee members is forbidden.⁴⁰

³⁷ See Appendix 5, Ariz. Corp. Comm’n Decision No. 72268, Docket No. L-00000SS-11-0059-0159 (2011) and related materials, including pre-filed testimony.

³⁸ A.R.S. § 40-360.02(B).

³⁹ *Id.* § 40-360.02(C)(1)–(7). “Arizona Electric Transmission System” is defined as “the existing electric transmission system serving this state and all transmission lines on file with the commission as of January 31 of the previous year.” A.R.S. § 40-360(5).

⁴⁰ A.A.C. R14-3-113.



Flagstaff, Arizona

4

Local Zoning Issues.

Project proponents on private and State Trust lands must consider local zoning issues during development. In this area, again, most Arizona jurisdictions are supportive and easy to deal with. Depending upon the existing land use prescriptions or zoning for a targeted parcel, all that may be required from a zoning approval standpoint is a minor amendment to a jurisdiction's general or comprehensive plan and a conditional use permit, though often rezoning of a parcel may also be necessary. Pinal County (essentially midway between Phoenix and Tucson) has seen considerable activity in the solar field and, in order to help streamline industrial-scale solar permitting, has added a Green Energy Production land use category to their Comprehensive Plan; this land use category designates areas specifically for the location of large-scale PV solar generation facilities. Within Maricopa County, the Town of Gila Bend has been famously welcoming to renewable development,⁴¹ establishing in 2012 the Gila Bend Transmission Initiative for the purpose of enhancing utility-scale solar in the vicinity of the Town.⁴² In Pima County (Tucson area), a Renewable Energy Incentive District ("REID") Ordinance was established in 2012. The REID ordinance mapped sites across the county where utility-scale solar development is encouraged, and the permitting and planning review process for projects in these areas is streamlined.⁴³ In northern Arizona, Navajo County established a Wind Energy Ordinance in 2010.⁴⁴ Coconino County is in the process of developing a new Utility-Scale Renewable Energy Ordinance.⁴⁵

41 See, e.g., The Gila Bend Photon Club, High Country News (May 28, 2012), available at <http://www.hcn.org/issues/44.9/the-fading-arizona-town-of-gila-bend-bets-big-on-solar>. High Country News, which covers development in the West from a conservationist perspective, described Gila Bend and its environs as perhaps the "best place for Big Solar."

42 See <http://www.gilabendaz.org/GilaBendTransmissionInitiative.html>.

43 Title 14 Renewable Energy Incentive District (REID). https://codelibrary.amlegal.com/codes/pimacounty/latest/pimacounty_az/0-0-0-9120.

44 <https://www.navajocountyaz.gov/Departments/Planning-and-Zoning/Wind-Energy-Ordinance>.

45 <https://www.coconino.az.gov/DocumentCenter/View/29532/Summary-of-Changes-to-the-Zoning-Ordinance---Update-2019>.



Watson Lake, Arizona

5

A Brief Detour into Federal Environmental Law.

Space and boredom for the reader prevent a thorough discussion of all potentially applicable federal environmental laws, but a few are worth noting. If you are already bored, you can turn immediately to Appendix 7, a planning chart that identifies a host of federal and state environmental laws that may be implicated by renewable energy and transmission line development.

NEPA.

NEPA is a procedural statute that requires federal agencies to evaluate the potential environmental impact of proposed “major federal actions.” Actions that potentially can trigger the need for a NEPA review include crossing federal or tribal lands, interconnecting to a federal transmission line, or building something in a “water of the United States,” wet or not. Developers of renewable facilities with short gen-ties can typically avoid NEPA triggers. Sponsors of lengthy transmission lines typically cannot, and the issue is the length and intensity of the necessary NEPA analysis. This analysis can include impacts to habitat, wildlife, archaeological and historical resources, air quality, and availability of natural resources. Barring the availability of a categorical exclusion—unlikely for significant undertakings—a study is required.

If you are lucky and have lived a good life, then the NEPA review requirements for your project can be satisfied in a year or less through completion of a relatively quick and simple Environmental Assessment

("EA") that produces a Finding of No Significant Impact ("FONSI," for those old enough to recall *Happy Days*). A proper FONSI is the end of the analysis. If you are not so lucky or good—not that the authors are in any position to judge—then the next step is the much more costly and slow Environmental Impact Statement ("EIS"), which one can rest assured will take at least twice as long.

NEPA can significantly complicate the siting process by generating substantial volumes of information about a proposed project. It can also require coordination between multiple state and federal agencies (and potentially interested Indian tribes), as well as various consultants, to ensure that different aspects of the analysis are completed in a timely manner. In Arizona, the checkerboard nature of land ownership and substantial prevalence of federal and tribal land, the prominent role of federal agencies such as the U.S. Bureau of Reclamation, and joint ownership of major transmission lines by federal agencies, brings many projects under the jurisdiction of NEPA.⁴⁶

On September 14, 2020, a major update to the NEPA regulations went into effect.⁴⁷ This rule, if upheld, would modernize and streamline a number of the NEPA regulations; however, it is already being litigated (unsurprisingly, since NEPA is the most litigated environmental statute) and it remains to be seen how deferential courts and, potentially, a new administration, will be to the new regulations.⁴⁸

The Endangered Species Act.

For a state that is damn hot and pretty dry, Arizona enjoys a surprising amount of biodiversity. In combination with the amount of federal land, this requires a considerable focus on the Endangered Species Act ("ESA"). In facility siting, the ESA both imposes requirements on federal agencies that are otherwise involved in projects and independently governs private conduct. Section 7 of the ESA requires that federal agencies consult with the U.S. Fish and Wildlife Service ("USFWS") to ensure that any agency action does not threaten the continued existence of an endangered or threatened species or adversely impact designated critical habitat.⁴⁹ Section 9 of the ESA prohibits unauthorized "taking" or killing of listed species of fish, plants, or wildlife.⁵⁰ Arizona law also provides for the preservation and protection of native plants that covers a number of plant species.⁵¹

You should know two things about the ESA. First, the mandates of Section 7 apply only to federal agency actions (e.g., granting a permit). A project whose development does not require a federal approval—such as those involving only state or private lands and facilities—is not subject to the consultation requirement. (It might, however, require an incidental take permit pursuant to Section 10.) Second, the Section 9 prohibition against unauthorized takings is universal, applying to both government and private actors alike. Impacts to habitat alone do not normally qualify as a taking under Section 9.

If Section 7 applies, the relevant federal agency initiates consultation by either requesting a roster of listed species and critical habitat in the project area from the USFWS or providing such a list to the USFWS.⁵² The USFWS has 30 days to provide the requested list or comment on the list provided.⁵³ If there are no listed species or critical habitat in the project area, the Section 7 consultation is over. If a

46 See also Appendix 4.

47 Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43304 (July 16, 2020).

48 See *id.* at 43309 (quoting James E. Salzman and Barton H. Thompson, Jr., *Environmental Law and Policy* 340 (5th ed. 2019) ("It might seem strange that NEPA's seemingly innocuous requirement of preparing an EIS has led to more lawsuits than any other environmental statute.")).

49 16 U.S.C. § 1536(a)(2).

50 *Id.* § 1538(a).

51 A.R.S. § 3-901, *et seq.*

52 50 Code of Federal Regulations ("C.F.R.") 402.12(c).

53 *Id.* 402.12(d).

listed species or critical habitat is present, then the relevant federal agency must engage in analysis to determine whether the proposed project “may affect” the species or habitat.

Depending on the scope of the proposed project, the federal agency will conduct a biological assessment or a biological evaluation. Private developers typically assume the cost of completing these assessments under the direction of the federal agency. If the federal agency and the USFWS agree that the proposed project is unlikely to adversely affect listed species or critical habitat, then the consultation—known as an informal consultation—is over.⁵⁴ If the federal agency believes that the proposed project will likely affect a listed species or critical habitat, or if the USFWS does not agree with the federal agency’s assessment that an adverse impact is unlikely, then formal consultation is required.⁵⁵ Formal consultation will result in a biological opinion from the USFWS as to whether there is a likely threat to the continued existence of listed species, or of critical habitat destruction or adverse modification.⁵⁶ In cases involving a permit applicant, the total consultation process cannot be extended beyond 150 days in the absence of explicit authorization to extend the period, once a final biological opinion is submitted to the USFWS.⁵⁷

While Section 9 prohibits takings of individual members of a species, the consultation process under Section 7 can authorize takings in an “incidental take statement” so long as the take does not jeopardize the continued existence of the species. For projects that do not otherwise require federal approval, permission for takings is also available in the form of an “incidental take permit” under Section 10 of the ESA. This, however, is an onerous process and project proponents should seriously consider both the ultimate likelihood of a taking and project modification before applying for an incidental take permit.

The Clean Water Act.

One might assume that a statute entitled “The Clean Water Act” would be of little concern to those building things in the arid desert. One would be wrong. Most notable for its regulation of discharges to pollutants into actual bodies of water, the Clean Water Act (“CWA”) also can govern activities deep in the Arizona desert. Of immediate concern in Arizona is Section 404 of the CWA, which can complicate the siting and construction of renewable energy facilities and related structures. Section 404 of the CWA is administered by the U.S. Army Corps of Engineers (“Corps”), with U.S. Environmental Protection Agency (“EPA”) oversight. Section 404 regulates discharges (or disturbances) to “waters of the United States.” Activities that will disturb areas designated as “waters of the U.S.” cannot proceed without a Section 404 permit from the Corps.

This makes a difference because the need to obtain a 404 permit might be a project’s only NEPA trigger, and because the executive, legislative, and judicial branches are confused about what qualifies as a “water of the U.S.”

Virtually every branch of government has proudly contributed to this confusion. Congress originally regulated actual “navigable waters” to prevent impediments to interstate commerce—that is, junk in rivers.⁵⁸ Over time, the CWA was amended to regulate pollution of waterways as well, with Congress ultimately deciding to provide that the original, limited universe of “navigable waters” should now mean “waters of the United States.” Exhausted by this one-line redefinition, Congress opted not to actually define the term, leaving it to the regulating executive branch agencies, the Corps, and the EPA.

⁵⁴ *Id.* 402.12(k), 402.13.

⁵⁵ *Id.* 402.12(k), 402.14.

⁵⁶ *Id.* 402.14(g), (h).

⁵⁷ *Id.* 402.14(e).

⁵⁸ See C. Thomas, “Defining Waters of the United States: A Mean-Spirited Guide,” *ABA Natural Resources and Environment* (Summer 2015).

On April 21, 2020, the EPA and the Corps released the Navigable Waters Protection Rule: Definition of “Waters of the United States.”⁵⁹ The agencies asserted that the rule was intended to limit “federal authority over those waters that Congress determined should be regulated by the Federal government under its Commerce Clause powers, while adhering to Congress’ policy directive to preserve States’ primary authority over land and water resources.”⁶⁰ The 2020 Rule was a sharp departure from their previous attempt to define the undefinable, which was published in 2015 and proposed to essentially adopt the definition of “waters of the United States” proposed by Justice Kennedy in concurring in the decision in a 2006 U.S. Supreme Court case, *Rapanos v. United States*. Justice Kennedy’s concurring opinion—the fifth vote—opined that “waters of the United States” should include not only traditional navigable rivers, but also tributaries, washes, ditches, canals, and other features that have a “significant nexus” to a traditional navigable water. That significant nexus, Justice Kennedy continued, could be in the form of a physical, chemical, or biological connection. It remains to be seen which version of the Rule will prevail; the new Rule has already been stayed in Colorado and is being litigated elsewhere.⁶¹ In the meantime, regulated entities would be well-advised to cautiously approach permitting under the CWA.

The potentially broad scope of Section 404 is mitigated by the fact that there are a number of nationwide permits available under Section 404. Nationwide permits are essentially pre-approvals that are meant to speed up the permitting process. Nationwide Permits 12 and 51 are of particular interest to parties developing renewable resources.⁶² Nationwide Permit 12 (Utility Line Activities) covers “activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than ½-acre of waters of the United States for each single and complete project.”⁶³ If the project impacts are greater than ½ acre, applicants can expect to go through the individual permit process, which is fairly lengthy and will likely involve mitigation to offset impacts. Nationwide Permit 51 (Land-Based Renewable Energy Generation Facilities) covers the construction, expansion, or modification of land-based renewable energy production facilities and associated structures including “roads, parking lots, and storm water management facilities within the land-based renewable energy generation facility.”⁶⁴ These permits authorize the loss of up to ½ acre of waters of the U.S. or ½ acre of non-tidal waters of the U.S., respectively. In order to invoke a nationwide permit, the permittee must provide pre-construction notification to the Corps and comply with the relevant limitations and general conditions of the permit.

59 85 Fed. Reg. 22,250.

60 *Id.*

61 *Compare, e.g., California v. Wheeler*, No. 20-CV-03005-RS, 2020 WL 3403072, at *1 (N.D. Cal. June 19, 2020) (“plaintiffs have not made a sufficient showing to support an injunction or an order delaying the effective date of the new rule”) with *State v. U.S. Env’tl. Prot. Agency*, No. 20-CV-1461-WJM-NRN, 2020 WL 3402325 (D. Colo. June 19, 2020) (enjoining agencies from implementing the rule in Colorado).

62 Given current litigation over the use of NWP 12, the U.S. Army Corps of Engineers has proposed splitting NWP-12 into NWP-12 (for oil and gas pipelines), while creating NWPs C & D for electrical/telecommunications lines and water/sewer utility lines. Proposal to Reissue and Modify Nationwide Permits, available at https://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/news/2020NWP-ProposedRule_prepublication.pdf?ver=2020-08-03-145146-273.

63 2012 Nationwide Permits, Conditions, District Engineer’s Decision, Further Information, and Definitions (with Corrections), U.S. Army Corps of Engineers, at 7.

64 *Id.* at 26-27.



Antelope Canyon, located on the Navajo Nation reservation

6

Opportunities for Development on Tribal Lands.

Some of Arizona’s most developable lands are tribal lands. See Figure 3. Nowhere is this more relevant than the Navajo and Hopi Tribal Reservations in the northeast corner of the state. With the closure of the coal-fired Navajo Generating Station in 2019, the political climate is rapidly shifting in favor of utility-scale solar developments as a replacement for lost jobs and revenues. Not only are there great solar resources (some say as much as 10 Gigawatts!)⁶⁵ and large areas of developable lands, there is also a significant amount of existing high-voltage transmission infrastructure crisscrossing tribal lands (largely owned and operated by the federal government). These transmission lines deliver electricity to power-hungry markets in southern Arizona, Nevada, and California.

This is not to say that there are not still challenges to developing on tribal lands. Leasing and contracting with tribes and tribal entities can be a highly complex process because of the unique legal status of Indian tribes—and their lands—in the American legal system. Indian reservations are considered to be federal lands, which implicates a series of federal laws and regulations that do not necessarily apply, or that apply differently, on private lands; use of tribal lands can also involve significant archaeological and cultural resource issues, employment rules, and other considerations that may be unfamiliar to a developer that has not previously undertaken a project on tribal lands. Further, as sovereign governments, Indian tribes have the ability to adopt resolutions or ordinances that can alter or invalidate

⁶⁵ <https://pv-magazine-usa.com/2020/04/22/navajo-power-ceo-sees-10-gw-renewable-potential-across-the-navajo-nation/>.

Tribal Homelands In Arizona

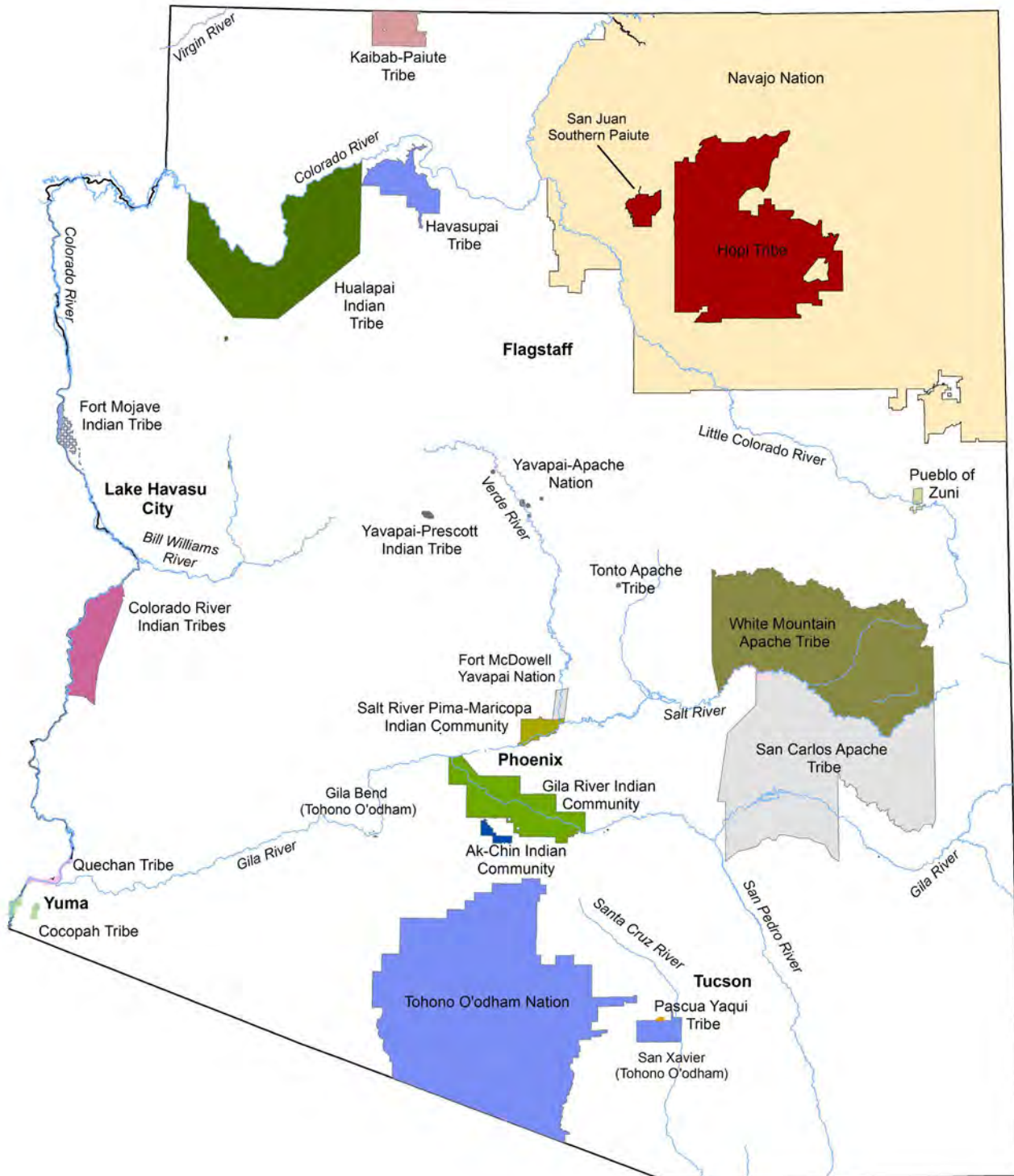


Figure 3. Arizona Tribal Lands.

Source: <https://itcaonline.com/maps/>

contractual agreements with a tribe. The only way to limit this risk is to include provisions that allow for termination or rent offsets in the event that the tribe changes the terms of the agreement.

Indian tribes also enjoy inherent sovereign immunity from suit by all but the federal government, which means that, absent a waiver, a tribe is immune from private-party suit and from the enforcement of a private-party award against it.⁶⁶ This is true even where this leaves an adverse party without a remedy in a contractual setting.⁶⁷

There are also significant issues concerning the exercise of jurisdiction over a tribe—or the subject matter of a contract with a tribe—which may limit (or even eliminate) the fora available to an injured party in the event of a dispute. Jurisdictional issues are particularly complicated when the agreement involves a lease of tribal trust lands. With few exceptions, issues related to tribes and tribal lands cannot be addressed in Arizona state courts. Complex rules exist governing when and if an injured party can gain access to federal courts, particularly when a tribe maintains its own tribal court system.

Finally, tribal leases are generally subject to approval by the U.S. Bureau of Indian Affairs (“BIA”), and procedural flaws in the approval process can negate a lease. Leases and right-of-way approvals by BIA are also subject to NEPA. On certain occasions, tribes and the BIA have invoked alleged procedural flaws in order to force negotiation of a new lease.⁶⁸

The default forum for the resolution of tribal lease disputes is generally a tribal court. Normally, when no tribal forum exists, state courts can exercise jurisdiction, and the inclusion of appropriate choice-of-forum, choice-of-law, and consent clauses will effectively resolve jurisdictional concerns.⁶⁹

Among many other complications, the risk of contracting with a tribal entity depends upon the type of entity it is. The 1934 Indian Reorganization Act (“IRA”), 25 U.S.C. § 461 *et seq.*, provided for the formal organization of tribal governments pursuant to federal law. Section 16 of the IRA (25 U.S.C. § 476) authorized tribes to adopt constitutions and bylaws, and § 17 of the IRA (25 U.S.C. § 477) authorized the formation of tribal corporations. While there are no restrictions against tribal governments entering into leases, dealing with a § 17 tribal corporation is less risky for a private party. Section 17 tribal corporations generally waive sovereign immunity in their corporate charter. Further, unlike the § 16 entity, a § 17 corporation is considered a citizen of the state of its principal place of business for federal diversity jurisdiction purposes.

Needless to say, investing in a facility located on tribal lands requires exceedingly careful lawyering.

66 See *United States v. U.S. Fidelity and Guaranty Co.*, 309 U.S. 506 (1940).

67 See *Pan American Co. v. Sycuan Band of Mission Indians*, 884 F.2d 416 (9th Cir. 1989).

68 *E.g., OMG Apex, Inc. v. Acting W. Regional Director*, 43 IBIA 265 (2006) (voiding a lease agreement between the Shivwits Band and OMG for land and water rights on the Shivwits Band reservation).

69 In determining the locus of a contract dispute with a tribe, the Ninth Circuit employs a “significant contacts” test. See *R.J. Williams Co. v. Ft. Belknap Housing Authority*, 719 F.2d 979, 985 (9th Cir. 1983), *cert. denied*, 472 U.S. 1016 (1985). Under this test, courts look to: (1) the place of contracting, (2) the place where the contract was negotiated, (3) the place of performance, (4) the location of the subject matter of the contract, and (5) the place of the residence of the parties, and evaluate each factor according to its importance in the dispute. “When a contract concerns a specific physical thing, such as land or chattel, the location of the thing is regarded as highly significant.” *Id.* at 985.



North Kaibab Trail, Grand Canyon National Park, Arizona

7

Federal Lands.

The federal government has expressed a strong interest in developing renewable energy on federal lands in Arizona. While some projects have been proposed and constructed on U.S. Forest Service lands, the majority of federal lands suitable for renewable energy development in Arizona are Bureau of Land Management (“BLM”) lands. In an effort to encourage consideration of federal lands for renewable energy, the Department of Energy and the BLM as part of the Department of the Interior have completed a Programmatic Environmental Impact Statement (“PEIS”) for solar and wind energy development covering certain federal lands in Arizona.^{70, 71} The Solar and Wind PEISs are meant to streamline NEPA and other federal reviews when developing utility-scale projects on federal lands. A key component of the Solar PEIS is the designation of solar energy zones (“SEZs”) in Arizona.⁷² SEZs are areas determined by the BLM to be suitable for development of solar energy generation and associated transmission facilities, both in terms of solar resources and impacts to the environment and wildlife. In order to facilitate development of these lands and avoid competing development interests, these lands have been withdrawn from location of mining claims. There are three SEZs in Arizona: Agua Caliente (in Yuma County), Gillespie (in Maricopa County), and Brenda (in La Paz County). The Solar PEIS also allows for the development of utility-scale solar energy on federal lands, known as variance areas, outside of the SEZs. Projects in variance areas are approved on a case-by-case basis, as opposed to

70 Solar Energy Development Programmatic EIS: <https://solareis.anl.gov/>.

71 Wind Energy Development Programmatic EIS: <https://windeis.anl.gov/>.

72 See Appendix 6 for a map of Arizona’s SEZs.

the broad authorization for solar development within a SEZ. Further building on the Solar PEIS, the BLM completed an Arizona Restoration Design Energy Project,⁷³ which established the Aqua Caliente SEZ and Renewable Energy Development Areas (“REDAs”). The goal of the project was to further evaluate the development potential of brownfield sites and areas of low resource conflict across the state. As part of the Solar PEIS the BLM intended for ongoing identification of additional or expanded SEZs approximately every five years, which has not occurred; however, the BLM is currently reviewing the Solar PEIS program with plans to complete a supplemental PEIS over the next two years. The supplemental PEIS will include an analysis of, and basis for, updating the BLM’s land management plans and activities for solar energy development on public lands, and is being expanded from the original Solar PEIS to include all of the western United States.

73 Restoration Design Energy Project, ePlanning: <https://eplanning.blm.gov/eplanning-ui/project/79922/510>.



Roaring Springs, Grand Canyon National Park, Arizona



Mooney Falls, Arizona

8

State Trust Lands.

Arizona energy projects routinely involve working with the Arizona State Land Department, which controls some 9.3 million acres of erratically distributed State Trust land. See Figure 4, or the Arizona State Land Department parcel viewer, here: <http://gis.azland.gov/webapps/parcel/>. More than 1 million acres of that land is near rapidly urbanizing areas. Congress granted Arizona its trust lands in 1912 in the Arizona-New Mexico Enabling Act, which established Arizona as a state. (Statehood for Arizona probably seemed like a good idea at the time.) As is generally the case throughout the West, the Land Department is required to maximize revenue from the sale or lease of trust lands to benefit public education and certain other public institutions.⁷⁴ That, as well as the relative ease of working with the Land Department compared to federal agencies, can make trust lands an attractive development alternative to federal lands.

State Trust lands have frequently been disregarded by renewable energy developers and investors, but shouldn't be. Unlike most privately held lands, many trust lands are held in large, contiguous parcels, some approaching hundreds of square miles, and many are appropriate for solar development. Around 8.5 million acres of trust land are currently devoted to agricultural and grazing uses, producing negligible income. More than 90% of the Land Department's recent annual revenue has been generated by sales or leases of small parcels (generally 2,000 acres or less) of land for commercial purposes. Although

⁷⁴ P. Culp, A. Laurenzi, C. Tuell, *State Trust Lands in the West: Fiduciary Duty in a Changing Landscape*, Lincoln Inst. of Land Policy (2006), Ch. 3.

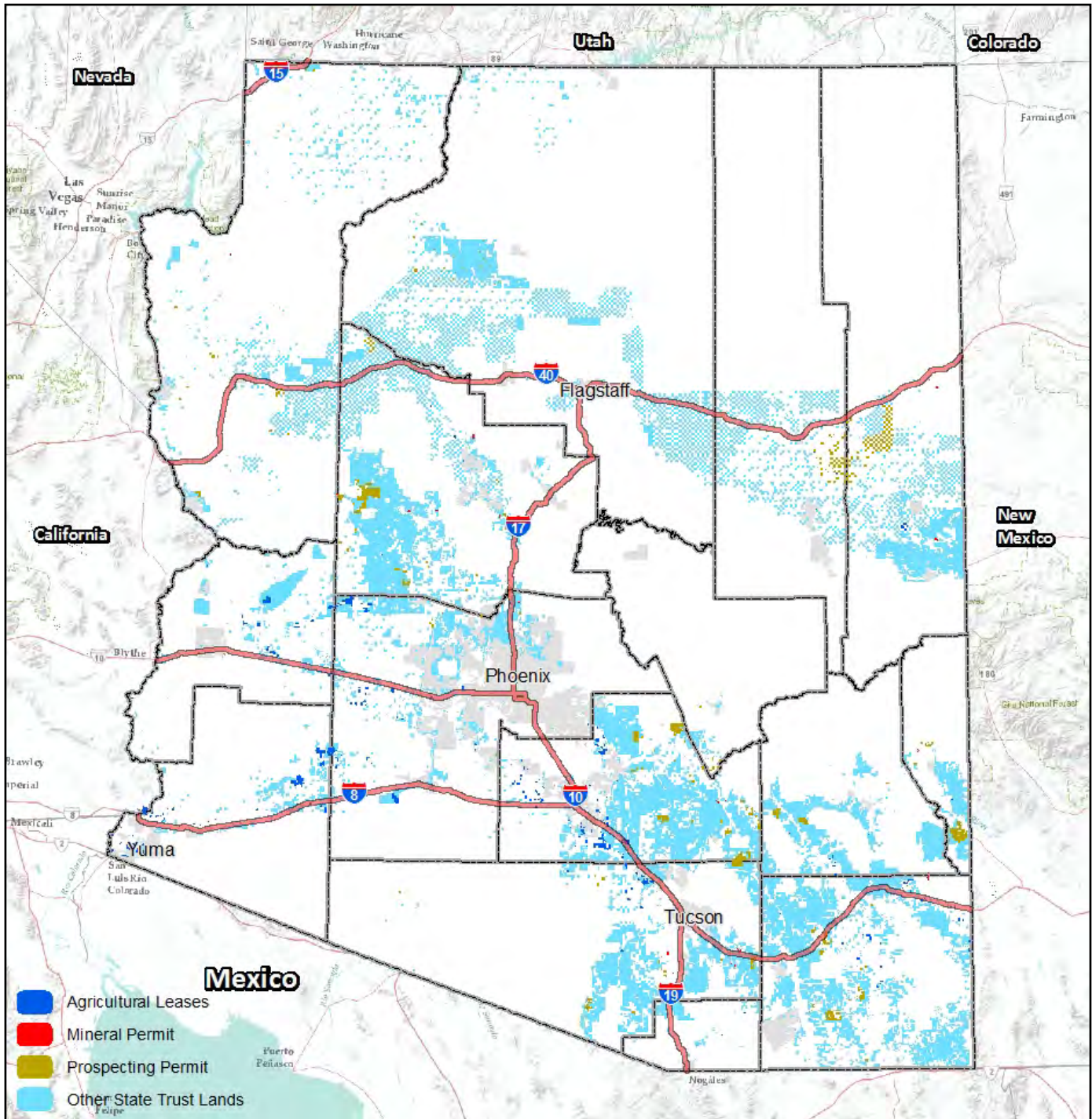


Figure 4. State Trust Lands in Arizona.

Source: See slide 7 at https://superiorazcwg.org/download/54/cwg-presentations/1647/state-trust-land-in-arizona_vanessa-hickman_6-18-14.pdf

many near-urban trust lands are likely to be developed residentially in the very long term, given rates of land absorption, natural resource constraints, and political considerations, it is unlikely that the Land Department will sell more than a small percentage of its overall portfolio for development over the next few hundred years. This has led to significant interest by the Land Department in alternative revenue sources, including renewable energy, and the Land Department has invested a substantial amount of staff time and energy into developing model leases and other similar documentation to make State Trust lands more attractive to renewable energy developers.

The Land Department enjoys broad authority to sell or lease trust lands, with certain exceptions, upon application or on its own initiative.⁷⁵ Identified lands are then appraised,⁷⁶ and, with appropriate public notice, sold or leased “to the highest and best bidder . . . at public auction held at the county seat.”⁷⁷

75 See A.R.S. § 37-233 & 37-281.02.

76 See *id.* § 37-132(A)(5).

77 *Id.* § 37-236(A).



Wind Turbines



Water Management in Arizona.

One could spend a lifetime learning the nuances of Arizona surface water and groundwater law. Granted, it would be a bleak life, so we have done that for you. Access to water in some quantity will of course be a key consideration for most energy projects. Particularly where a project will require a large amount of water—say, a concentrating solar power plant—this can require a project developer to navigate complex statutory and common-law restrictions on the use of both surface water and groundwater.⁷⁸ Those restrictions, in turn, vary based on geographic location. Feel free to page ahead to the next section, which can't possibly be any less interesting than this one.⁷⁹

Surface Water in Arizona.

In Arizona, surface water is governed by the common law of prior appropriation—in essence, a rule of “first in time, first in right.”⁸⁰ Under the prior appropriation system, which applies in all Western states, the first user to divert water from a stream and put it to beneficial use obtains a right to continue such

⁷⁸ Recognizing the broad linkage between surface waters and groundwater, “most states have conformed their law to hydrological reality” by abandoning the separate regulation of surface and groundwater. *In re General Adjudication of All Rights to Use Water in the Gila River System and Source*, 857 P.2d 1236, 1241 (Ariz. 1993) (*Gila II*). Not Arizona, however; our courts are trying to establish objective criteria for distinguishing between the “subflow” of surface streams and regular old groundwater. (We’re not big on hydrological reality.)

⁷⁹ Among other things you likely don’t need to know is that use of Colorado River water by the interbasin states is governed by a compilation of legal documents (further discussed in Section IX(A) herein) that are collectively known as the “Law of the River.” That gives Arizona an allotment of 2.8 million acre-feet per year, but also provides that we’re the first state to lose water in the event of a shortfall.

⁸⁰ *Ariz. Cooper Co. v. Gillespie*, 100 P. 465, 469-70 (Ariz. Terr. 1909), *aff’d* 230 U.S. 46 (1913).

diversions with a priority senior to all subsequent diverters, even those who are left high and dry by the continued diversion. While this rule sounds simple enough, when applied to rivers and streams with hundreds or thousands of potential users, it can create legal issues of mind-numbing complexity.

Surface water rights are tracked and managed by the Arizona Department of Water Resources (“ADWR”) through an application and registration program, and are subject to final determination by the Arizona courts.⁸¹ Surface water rights are generally treated as being “appurtenant” (i.e., legally attached) to the lands on which they were historically used, and thus are transferable with the lands with which they are associated; changes in the type of use, point of diversion, or place of use are subject to a statutory transfer process and can be subject to potential objections by third parties. Importantly, however, surface water rights within the state’s numerous agricultural districts can generally be more easily transferred under the supervision of the district’s governing board.

Because surface water rights are based on historic diversions and uses that in many cases have limited documentation, there is inherent uncertainty regarding the actual quantity and priority of many surface water rights. In many watersheds within the state, courts have issued decrees of various scopes addressing the relative amounts and priorities of the water rights in portions of those watersheds. However, a final reckoning of the relative rights and priorities to most surface water within the state will require completion of Arizona’s two major general stream adjudications—judicial proceedings in which the nature, extent, and relative priority of water rights are determined.⁸² But don’t hold your breath—the Gila River Adjudication, which covers much of the central and southern portions of the state, has been pending for over 40 years. As a result, diverting surface flow is usually not the easiest means of access to water.

Additionally, Colorado River water is treated differently than other kinds of surface water in Arizona. The Colorado River is governed by a compilation of interstate compacts, international treaties, contracts, federal and state laws and regulations, and court decisions that are collectively known as the “Law of the River.” Colorado River water is delivered pursuant to federal water delivery contracts administered by the U.S. Bureau of Reclamation, which operates the major Colorado River storage and diversion dams. Within the central parts of the state, Colorado River water can also be accessed from the Central Arizona Project (“CAP”), a 336-mile-long canal that diverts water from the reservoir behind Parker Dam and carries it to Phoenix, Pinal County, and Tucson. The CAP is operated by the Central Arizona Water Conservation District (“CAWCD”), a multi-county special taxing district. CAWCD delivers water under delivery contracts to a number of customers, primarily municipal users, Indian tribes, industrial users, and agricultural districts.

Groundwater Use in Arizona.

Arizona has an effectively bifurcated system of groundwater regulation, with groundwater in major urban and agricultural areas closely regulated by statute, and other areas subject only to limited, common-law rules. Arizona’s Groundwater Management Act of 1980 (“GMA”) established a detailed regulatory program to address concerns in areas of critical groundwater overdraft.⁸³ The GMA established Active Management Areas (“AMAs”) in four groundwater basins: Prescott, Phoenix, Pinal, and Tucson.⁸⁴ A

⁸¹ See generally A.R.S. §§ 45-151 *et seq.*

⁸² See *id.* § 45-252. Surface water rights for two river systems in Arizona are currently being adjudicated: the Gila River and the Little Colorado River. These two adjudications cover nearly half of the state, and the Gila River Adjudication alone includes nearly 30,000 parties.

⁸³ *Id.*

⁸⁴ See A.R.S. § 45-411.

fifth AMA, the Santa Cruz AMA, was later carved out of the Tucson AMA. The GMA also created two Irrigation Non-Expansion Areas (“INAs”) in the Harquahala Valley and Joseph City areas.

Managed by ADWR, each AMA has a “Management Goal.” For Prescott, Phoenix, and Tucson, the Management Goal is achieving safe-yield (pumping no more groundwater from the aquifer than what is recharged annually). Each AMA also has a “Management Plan,” which addresses the types of water use, conservation requirements, and overall use limitations associated with a series of commercial, industrial, agricultural, and residential water uses within each AMA. These include the amount of water available to individual permitted water users, such as golf courses, as well as the amount of water available under individual groundwater rights.

Within the AMAs, the use of groundwater by individual users is limited by a system of groundwater rights and groundwater use permits. Under the GMA, virtually all pre-existing uses of groundwater were granted “grandfathered groundwater rights” that allowed for the continuation of those uses.⁸⁵ A few of these rights, known as Type 2 rights, are freely transferable. Most grandfathered rights, however, are limited to particular places and/or types of use, so one must be careful when considering a purchase of groundwater rights. Groundwater use permits can also be issued for a variety of uses within AMAs, including industrial and mining uses, where withdrawal of groundwater is necessary as an alternative to water service from a local provider or via a groundwater right.⁸⁶ The law also provides for groundwater recharge activities and associated “long-term storage credits” that allow users to store water underground; the credits generated by these activities can be used to replenish groundwater extracted elsewhere or can be used to meet future demands.⁸⁷

By contrast, groundwater pumping in those parts of Arizona that lie outside of the AMAs and INAs is governed only by the common-law doctrine of “reasonable use.” This doctrine effectively allows a landowner to extract groundwater for any reasonable use on the land from which it is taken.⁸⁸ In practice, this does not impose any meaningful restriction on the use of rural groundwater. However, where a project is located on (or will need to withdraw water from) State Trust lands or federal lands, additional restrictions unique to those lands (as well as restrictions imposed by the terms of leases of those lands) will apply. For instance, due to the state’s critical interest in protecting water resources, the ACC siting process frequently requires evaluation of water use impacts and/or imposes water use restrictions or mitigation requirements on energy facilities as part of CEC conditions. It is also important to note that, with few exceptions, Arizona does not permit the transport of groundwater from one groundwater basin to another groundwater basin, or from areas outside of the state’s AMAs into the AMAs.

In addition, groundwater uses in the vicinity of surface water sources are potentially subject to Arizona’s tangled “subflow” doctrine, which addresses the hydrological interaction between surface water and groundwater. Essentially, this doctrine provides that groundwater that is closely enough associated with a surface stream must be treated as surface water, and is subject to the prior appropriation system described above.⁸⁹ This continues to be the subject of extensive litigation in the state’s adjudication process. The determination as to whether a particular well could in fact pump subflow is a relatively fact-intensive, nuanced issue that involves disturbing words and phrases like “the pre-development extent

85 See *id.* § 45-462.

86 See *id.* §§ 45-511 to -528.

87 See generally A.R.S. § 45-801.01, *et seq.*

88 *Bristor v. Cheatham*, 75 Ariz. 227, 225 P.2d 173 (1953).

89 See *Gila II*, 857 P.2d at 1241.

of the saturated Holocene floodplain alluvium.”⁹⁰ Fortunately, there are still a few consultants and legal experts who think this stuff is interesting, and who can tell you what they think it all means.

Effluent.

An increasingly important potential source of water for renewable energy facilities and other industrial users is municipal effluent. Effluent enjoys a unique legal status under Arizona law, qualifying as a “third category of water”—neither surface water nor groundwater—that is the legal property of the entity generating it.⁹¹ As a result, effluent can typically be made available to support industrial uses via agreements with the municipalities or private water/wastewater providers that produce it, frequently irrespective of the more complex restrictions that govern the use of surface water or groundwater.

90 ADWR, Subflow Technical Report: San Pedro River Watershed (Sept. 28, 2005), at 21.

91 See A.R.S. §§ 45-101(4), 139.02; see also *Ariz. Pub. Serv. Co. v. Long*, 761 P.2d 133, 137 (Ariz. Ct. App. 1988).



Colorado River in Butler Valley, Arizona



Burrowing Owl

10

Federal and State Wildlife Management.

If a project has a federal nexus, the lead federal agency would, at a minimum, consult with the USFWS under Section 7 of the ESA regarding the potential for project impacts to listed species. Coordination with the USFWS is also recommended regarding the potential take of bald and golden eagles and migratory birds. For developments on State Trust lands, the Arizona State Land Department would need to be informed regarding state-protected plant species. While not required for private lands, several local jurisdictions may have policies in place to consult with the Arizona Game and Fish Department (“AGFD”) during the local development permit process (e.g., zoning and conditional use permits).

Federal and State Wildlife Wind Energy Development Guidelines

The USFWS and AGFD have developed recommended guidelines for wind energy development, largely to reduce potential impacts to birds, eagles, and bats. The USFWS generally recommends that wind projects follow guidelines in the USFWS’s Eagle Rule,⁹² *Land-Based Wind Energy Guidelines*,⁹³ and *Eagle Conservation Plan Guidance*;⁹⁴ AGFD would recommend that wind projects follow guidelines for wind energy development in *Guidelines for Reducing Impacts to Wildlife from Wind Energy*

92 USFWS. 2016. Eagle permits; revisions to regulations for eagle incidental take and take of eagle nests. Federal Register 81:91494-91554.

93 USFWS. 2012. *U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines*. Available at: <https://www.fws.gov/midwest/es/wind/guidance.htm>.

94 USFWS. 2013. *Eagle Conservation Plan Guidance: Module 1 – Land-Based Wind Energy Version 2*. U.S. Fish and Wildlife Service Division of Migratory Bird Management. April 2013.

Development in Arizona.⁹⁵ Table 1 summarizes the latest USFWS and AGFD recommended survey and plan types, and time frames for the project.

Table 1. Federal and State Recommended Wildlife Surveys, Plans, and Time Frames for Wind Energy Development

Survey/Plan Type	Time Frame
Preliminary Site Screening/Evaluation/Characterization	Agency coordination regarding project development as early as possible
Preconstruction Survey Plan	Agency vetting of bird, eagle, and bat survey methodology/plan as early as possible
Eagle Use Surveys; results of surveys compiled into an Eagle Conservation Plan	Surveys completed for 2 full years
General avian (non-eagle large and small bird) use surveys; results of surveys compiled into a report and/or Bird and Bat Conservation Strategy	Non-eagle large bird surveys completed for 2 full years; small bird surveys for at least 1 full year
Eagle and other raptor species nest surveys; results of surveys compiled into a report; eagle results compiled into an Eagle Conservation Plan	Two full years of aerial nest surveys
Bat acoustic surveys	Surveys completed for 2 full years
Bird and Bat Conservation Strategy	Completed prior to project operation
Eagle Conservation Plan	Completed prior to project operation

State Wildlife Solar Energy Development Guidelines

Although the USFWS and AGFD have developed guidelines for wind energy development, only AGFD has guidelines for solar energy development in Arizona. The recommendations in the *Guidelines for Solar Development in Arizona*⁹⁶ should be considered along with formal agency coordination as early as possible in the development process. The AGFD recommended guidelines largely target assessment of potential impacts a project may have on wildlife species and include suggested measures to avoid, minimize, and mitigate identified impacts; no specific time frames for assessment are included. The following summarizes AGFD recommendations:

- Consult with AGFD early in the project conceptual process to identify any potential impacts to special-status species and other wildlife in the development area
- Complete a preliminary site screening to assess the biological sensitivity of a project
- Assess the degree to which a project may adversely affect/contribute to habitat loss, fragmentation, and connectivity, as well as changes in site hydrology
- Analyze project cumulative effects
- Develop adequate mitigation plans for wildlife species and habitat loss
- Avoid and minimize project impacts to hydrological resources (groundwater and surface water)
- Design facility infrastructure (e.g., transmission lines and fencing) to minimize impacts to wildlife
- Prevent and manage noxious or invasive plants during the life of the project; develop a revegetation plan that uses only native species
- Prevent/minimize effects to public recreation and access to public lands

95 AGFD. 2010 *Guidelines for Reducing Impacts to Wildlife from Wind Energy Development in Arizona*. Revised October 15, 2012.

96 AGFD. 2010. *Guidelines for Solar Development in Arizona*. Available at: <http://www.azgfd.gov/hgis/documents/FinalSolarGuidelines03122010.pdf>.



Flowering Saguaro

11

Arizona Environmental Permits.

A renewable energy facility in Arizona may need to obtain several different permits from the Arizona Department of Environmental Quality (“ADEQ”) (the state environmental regulatory agency) or, in some cases, a county regulatory authority. In particular, a facility may need a water quality permit and/or an air quality permit depending on its operations and the type of equipment it uses on-site.

Water Quality Permits.

AZPDES Permits.

Arizona is authorized by EPA to operate the National Pollutant Discharge Elimination System (“NPDES”) program under the CWA, which governs discharges to surface waters in the state.⁹⁷ This means that a renewable energy facility may need to obtain an individual Arizona Pollutant Discharge Elimination System (“AZPDES”) permit from ADEQ for a discharge into a “navigable” water body within Arizona, even if, as noted before, there is no water in it during part of the year (such as ephemeral washes and their tributaries). A facility may also need to comply with general permit requirements for construction activities and storm water runoff control.⁹⁸

⁹⁷ A.R.S. §§ 49-255 to -255.03.

⁹⁸ A.A.C. R18-9-C901 to R18-9-C905. See ADEQ AZPDES General Permit No. 2013001.

Drinking Water.

A facility may also need approval from ADEQ for the drinking water system that supports its workforce if the facility is not connected to a local water provider.⁹⁹ A water system that has at least 15 service connections or that regularly serves an average of at least 25 individuals daily at least 60 days out of the year must comply with state drinking water regulations.¹⁰⁰ A party must submit plans for ADEQ's review and approval for a new drinking water system, or to modify an existing system, before construction begins.¹⁰¹ A facility operator may also need to demonstrate to ADEQ that it can maintain adequate technical, managerial, and financial capabilities to consistently provide safe drinking water to its workers.¹⁰²

Aquifer Protection Permits.

A facility must obtain an Aquifer Protection Permit ("APP") from ADEQ if it discharges a pollutant either directly to an aquifer, to the land surface, or to the vadose zone in a manner that makes it reasonably probable that the pollutant will reach an aquifer.¹⁰³ An APP can be required for certain energy facility structures, such as blow-down cooling towers and evaporation ponds, as well as on-site wastewater treatment facilities.

Air Quality Permits.

Renewable energy projects may fall within the jurisdiction of ADEQ's air quality program if they meet certain regulatory requirements and, depending on the type of equipment they use and the level of emissions from that equipment,¹⁰⁴ may need to obtain air quality permits. Solar and wind projects may require an air quality permit (either an individual or general permit) for the process-support boilers and emergency-use engines they use. An individual air quality permit may be required for biomass boilers and other combustion-related processes.

99 A.R.S. §§ 49-351 to -360; A.A.C. R18-4-101 to R18-4-607.

100 A.R.S. § 49-352(B); A.A.C. R18-4-101. See <http://www.azdeq.gov/environ/water/dw/overview.html>.

101 A.A.C. R18-5-505 to R18-5-509.

102 *Id.* R18-4-601 to R18-4-607.

103 A.R.S. §§ 49-241 to -252; A.A.C. R18-9-101 to R18-9-E323.

104 A.R.S. §§ 49-401 to -467. ADEQ issues air quality permits for facilities that meet or exceed certain emissions levels or are located in a county without local air permitting authority. Three counties in Arizona—Maricopa, Pima and Pinal Counties—have local air quality departments that issue permits for facilities located within their boundaries with emissions levels below the threshold for a state permit from ADEQ.



Sunflowers in Flagstaff, Arizona

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Eminent Domain in the Utility Context.

For transmission-line developers facing uncooperative landowners, Arizona law is moderately helpful. Even private entities are entitled to condemn land for the purpose of power transmission lines. However, private parties are not generally entitled to take immediate possession, meaning that construction of a transmission line must await completion of trial on just compensation.

Arizona has three constitutional and statutory requirements for the taking of private property by condemnation: the proposed taking must be (1) authorized by law, (2) for a public use, and (3) necessary for such use.¹⁰⁵ Both public bodies and private entities can exercise the power of eminent domain for certain purposes.¹⁰⁶ One such enumerated purpose is to install “electric light and power transmission lines.”¹⁰⁷

The first element requires that the condemnor have the legal authority to take the planned action and the activity constituting the intended use must be one in which the condemnor is legally authorized to engage. The Commission process described in Section III above would establish that element.

¹⁰⁵ A.R.S. § 12-1112; Arizona Private Property Rights Protection Act (codified at A.R.S. § 12-1131); Ariz. Const. art. 2, § 17.

¹⁰⁶ A.R.S. § 12-1111.

¹⁰⁷ *Id.* § 12-1111(10).

The second element requires the condemner to demonstrate that the taking is necessary for a “public use.”¹⁰⁸ The Legislature has decided that use for electric transmission lines is a public use, so there can be no real dispute regarding the public use of the rights-of-way to be condemned.¹⁰⁹ Additionally, Arizona courts have long followed the broad view of public use, defined to include use by the public, public benefit, public advantage or convenience, and promoting the general objects and purposes of a governmental entity. “Public use” historically has included electric transmission lines,¹¹⁰ and “public use” was defined in the Private Property Rights Protection Act, approved by voters in 2006, to include “the use of land for the creation or functioning of utilities.”¹¹¹

Lastly and finally, a condemner must show that the taking is “necessary to such use.”¹¹² Judicial review of the “necessity” requirement is limited; courts generally will not disturb a legislative or condemning agency’s determination of necessity “in the absence of fraud or arbitrary and capricious conduct.”¹¹³ Again, the findings of the Siting Committee and the Commission would be entitled to great deference here.

Procedures for Condemning Interests in Land and Taking Possession.

General Procedures.

The general procedures for exercising the right of eminent domain are set forth by statute.¹¹⁴ At least 20 days prior to filing a complaint for condemnation, the Authority must deliver to the property owner of record a written offer to purchase the property or interest in the property and to pay just compensation for the property, and any compensable damages regarding the remaining property.¹¹⁵ The offer must constitute the condemning party’s estimate of just compensation.¹¹⁶ The condemning party must also deliver one or more appraisals that support the amount of the proposed compensation, and must post notice of the offer and appraisals in plain site on the property.¹¹⁷

The eminent domain complaint must set forth (a) the name of the person asserting the public use for which the property is sought, as plaintiff, (b) the names of all owners and claimants of the property, (c) a statement of the right of plaintiff, (d) if a right-of-way for a road, ditch, canal, or other purpose is sought, the location and general route, accompanied with a map thereof, and (e) a description of each piece of land sought to be taken.¹¹⁸ The case then proceeds as a normal civil lawsuit. Eminent domain actions are entitled to precedence over other civil actions.¹¹⁹

The parties ultimately are entitled to a jury trial, with the amount to be paid to the landowner often the primary issue. The landowner is entitled to “just compensation” for land taken, and for any severance damages regarding the remaining land. In the normal eminent domain case, the plaintiff does not acquire title to the interest acquired until the conclusion of the trial.

108 *Bailey v. City of Mesa*, 206 Ariz. 224, 227 (Ct. App. 2003); A.R.S. § 12-1112.

109 *See, e.g., id.* § 12-1136(5)(a)(ii).

110 A.R.S. § 12-1111(10).

111 *Id.* § 12-1136(5)(a)(ii).

112 *Id.* § 12-1112.

113 *See City of Phoenix v. Phoenix Civic Auditorium & Conv. Ctr. Ass’n*, 99 Ariz. 270, 277 (1965); *Bailey*, 206 Ariz. at 228 n.1; *City of Phoenix v. Superior Court*, 671 P.2d 387, 389 (Ariz. Ct. App. 1983).

114 A.R.S. §§ 12-1111 to -1129.

115 *Id.* § 12-1116(A).

116 *Id.*

117 *Id.* § 12-1116(A) & (B).

118 *Id.* § 12-1117.

119 *Id.* § 12-1121(B).

Immediate Possession.

Absent an agreement by a landowner, merchant power plant developers and private utilities cannot obtain possession of property necessary for construction of transmission lines until the conclusion of the jury trial. But under Article 2, Section 17 of the Arizona Constitution and A.R.S. § 12-1116(H), if the state or a political subdivision of the state is seeking the condemnation, they may accelerate obtaining possession of the property.¹²⁰ SRP also has immediate possession authority.

To obtain immediate possession, the condemnor applies for an order of immediate possession at any time after filing the complaint. The court will set a hearing on the necessity for the taking and on the likely amount for which a deposit of money or bond must be posted. The scheduling of the hearing will depend upon the circumstances. This process accelerates the taking of possession of the easements to be acquired, and allows possession of the transmission corridor to be obtained more rapidly. A private party does not have the right to seek immediate possession.¹²¹ The primary issues to be determined at a hearing on immediate possession are necessity and probable damages.¹²²

A landowner can obtain review of an order granting immediate possession by filing a petition for special action in the Court of Appeals. If the appellate court accepts discretionary review, the court will review the immediate possession order. The trial court has discretion to postpone possession pending review by the Court of Appeals.

If the trial court denies the request for immediate possession, the case proceeds as a normal litigation matter, as described above. If the trial court grants immediate possession, and no appellate review is requested, then the Authority would obtain possession of the property after posting sufficient funds as directed by the court, and the remainder of the case would proceed through the normal litigation process (in order to determine just compensation and damages), ultimately ending in a jury trial.

¹²⁰ See EMINENT DOMAIN IN ARIZONA § 11.6 (2004 ed.) (citing *Hughes Tool Co. v. Superior Court*, 91 Ariz. 154 (1962)).

¹²¹ *Hughes Tool Co.*, 91 Ariz. at 154.

¹²² See EMINENT DOMAIN IN ARIZONA § 11.6 (2004 ed.) (citing *Town of Paradise Valley v. Laughlin*, 174 Ariz. 484 (App. 1992)).



White House Ruins, Anasazi ruins in Canyon de Chelly, Anasazi

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Conclusion.

Arizona's combination of patchwork land ownership and multiple federal and state agencies may present a challenge to developers of generating facilities and transmission lines, but you could do a lot worse. If project proponents engage with regulators early and often, state and federal agencies that favor development of renewable resources can help pave the way for a successful project.

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Chris Thomas: Long past his prime, Chris has practiced environmental counseling and litigation in Arizona for more than 30 years. An Omaha native, he was the last one in his kindergarten class to learn how to tie his own shoes. He is a graduate of the University of Iowa College of Law, where he was neither summa cum laude nor editor-in-chief of the Iowa Law Review, and Drake University. An unlikely trophy husband, Chris lives in Phoenix with his much more accomplished wife Karen Peters, their three sons, and a neurotic English bulldog. Before becoming the shell of a man you see here, he was elected to the American College of Environmental Lawyers. He can be reached at (602) 351-8045 and cthomas@perkinscoie.com.



Matthew Rojas: Matt, a former field geologist with the charisma to prove it, has a decade of experience in environmental, natural resources, water, and energy law. He is a 2006 graduate of the University of Michigan Law School and is listed by Southwest Super Lawyers, although it is unclear what his superpower is. He lives in Phoenix with his wife Katie, a professional artist, and their four children. A 2003 graduate of Brigham Young University, Matt is the shortest of the authors. He can be reached at (602) 351 8429 and mlrojas@perkinscoie.com.



Andrea Driggs: Andrea, unlike her Perkins colleagues an actual smart person, represents major infrastructure clients in Arizona, California, and Nevada. She holds a J.D. from UCLA, a master's degree in environmental epidemiology and policy from the University of London, and a B.S. from Arizona State University. Andrea lived for three years each in São Paulo and Shanghai and is fluent in Spanish and Portuguese and proficient in Mandarin. A former epidemiologist with Los Angeles County, Andrea's hobbies include telling her coworkers how they are likely to die. She lives in Phoenix with her husband Ben and their two sons.

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Cara Bellavia: As Vice President, Cara is responsible for advancing SWCA's scientific and technical strategy, staff development and mentoring, large-project execution, and client development. She offers her advice and lessons learned on recent and ongoing projects to ensure project efficiency. Cara's areas of expertise include managing large infrastructure National Environmental Policy Act projects and providing environmental planning oversight for SWCA projects. She has experience managing complicated, controversial environmental projects for renewable energy, transmission lines, roadways, and pipeline projects throughout the West.



Devin Petry: Devin provides environmental project management and research and development expertise, with a focus on land use planning and facility siting. He has managed or contributed to the preparation of state Certificates of Environmental Compatibility; federal documents, including environmental impact statements, environmental assessments, and categorical exclusions; municipal/county permitting efforts, including rezoning, plan amendments, and use permits; and technical reports. Devin has managed numerous facility siting studies and analyses for electrical transmission and generation projects, including electrical saturation studies, sub-transmission siting studies, and high-voltage transmission siting studies. In these efforts, Devin has provided environmental expert witness testimony before planning and zoning commissions, boards of supervisors, and the Arizona Power Plant and Transmission Line Siting Committee.



Alex Shin: Alex is a project manager and environmental planner in SWCA's Flagstaff office. She has experience in National Environmental Policy Act compliance and permitting of renewable energy development, transmission, mining, and local transportation and utility projects in Arizona, Nevada, and New Mexico. Alex is also experienced in public involvement efforts, including public scoping and comment analysis for projects of various complexity and public interest.

APPENDICES

APPENDIX 1.

**Arizona Corporation Commission –
Biographies of Current Commissioners**

Arizona Corporation Commission

Article 15 of the Arizona Constitution establishes the Arizona Corporation Commission. Only seven states have constitutionally formed Commissions.¹ Arizona is one of only 13 states with elected, rather than appointed, Commissioners.²

The function of Commissioners in an executive capacity is to adopt rules and regulations, thereby functioning in a legislative capacity; Commissioners also act in a judicial capacity, sitting as a tribunal and making decisions in contested matters. The Commission is required by the Arizona Constitution to maintain its chief office in Phoenix and is required by law to conduct monthly meetings. The Commission consists of five members elected on a statewide basis every four years. The current members of the Commission are:³



Chairman Bob Burns (R)

Chairman Bob Burns currently serves as one of five state-wide elected members of the Arizona Corporation Commission. His first term began in January 2013, and he was recently re-elected to a second four-year term that started in January 2017. As a Corporation Commissioner, Bob oversees the regulation of Arizona's private water, wastewater, electric, gas, and telecommunications companies, as well as civil enforcement of the Arizona Securities Act, safety inspection of railroads and pipelines, and the incorporation of businesses.

During his time at the Commission, Bob has been actively engaged in issues pertaining to emerging technologies in energy.

He initiated the Commission's investigation into the technological developments that are impacting and/or are anticipated to impact our current energy model, including the following: solar, energy storage, fuel cells, microgrids, demand-side management, and smart grid. This investigation culminated in a report making several recommendations the Commission has adopted, including the following: reforming the utilities' Integrated Resource Planning, renewable energy, and smart grid integration policies, and establishing statewide interconnection rules to streamline the process for customers who seek to adopt new technologies. Importantly, his efforts have led to more customer choice in energy consumption and savings. He is frequently asked to speak about these topics at conferences nationwide. Bob hopes to continue to be a key player in guiding the anticipated changes to the regulatory and business models being driven by emerging technologies.

For the past 54 years, Bob Burns has lived in Arizona and played an important role in making Arizona a better place to live, work, and play. After serving as an Aviation Electronics Technician in the U.S. Navy, Bob was honorably discharged and in 1962 moved with his wife Gayle to Arizona, where he

1 <https://azcc.gov/divisions#:~:text=Only%207%20states%20have%20constitutionally,13%20states%20with%20elected%20Commissioners.>

2 Id.

3 Biographies and photographs courtesy of the Arizona Corporation Commission, <http://www.azcc.gov>. Note that Commissioner Boyd Dunn was removed from the ACC ballot in May of 2020: <https://azcapitoltimes.com/news/2020/05/01/boyd-dunn-removed-from-arizona-corporation-commission-ballot/>. Three seats are on the ballot in 2020; Sandra Kennedy won a seat in 2018 and is not up for re-election; Commissioner Olson is not on the ballot in 2020; and Chairman Burns is termed out. Commissioner Márquez Peterson is the only incumbent running for re-election.

began his career at a division of General Electric which later became part of Honeywell. As a computer programming analyst, Bob was instrumental in writing and installing many computer software systems for plants in the steel, paper, petrochemical, fuel distribution, and electrical generation industries. As a lead programmer, Bob wrote and tested standardized control panel software packages for power generation facilities.

After retiring from Honeywell, Bob and Gayle became small business owners. They owned and operated several businesses, including five Elementary Preparatory Schools. The combined schools were licensed to care for five hundred students per day. After twenty-seven years of operation, they sold their schools and now manage their commercial real estate properties.

In 1989, Bob began his career in public service as an elected State Representative. In the House of Representatives Bob was a distinguished leader. He was Chairman of Appropriations, and served on many committees, including Health, Judiciary, Ways and Means, Transportation, and Insurance.

In 2001, Bob was elected as a member of the Central Arizona Water Conservation District Board of Directors. The Board is responsible for overseeing the management of the Central Arizona Project, a 336-mile-long system of aqueducts, tunnels, pumping plants and pipelines, and is the largest single resource of renewable water supplies in the state of Arizona. It is also the largest user of electrical power in Arizona.

In 2003, Bob was elected to the Arizona State Senate where he again distinguished himself as an outstanding leader. Bob served as Chairman of Appropriations, and on a number of committees, including Rules and Finance.

In 2009, Bob was elected as President of the Arizona Senate, and served as such until 2010. During the twenty years that Bob served in the Legislature, he was Chairman of the Appropriations Committee for fourteen years.

While serving in the Legislature, Bob Burns received many recognitions and awards, including the following:

“Watchdog Award”. An award given by the Arizona Tax Research Association to legislators who fight for the taxpayer and target wasteful spending in government.

“Legislator of the Year”. An award given by the American Legislative Exchange Council to state legislators who have distinguished themselves by taking a leadership role in advancing, introducing, and/or enacting policies based on principles of free markets, limited government, and individual liberty.

“Senator of the Year”. Awarded by the Arizona Chamber of Commerce.

“Champion of the Taxpayer”. Awarded by Americans for Prosperity.

“Nations Renewable Energy Leader”. Business Facilities Magazine.

Autism Society of America “dedication and leadership at the Arizona Legislature”.

Bob’s public and community service extends beyond his substantial time in the Legislature. As an active member of the community, Bob has served on the Board of Directors for Friends of the West Valley Recreation Corridor, and is a member of Arizona Town Hall.

In 1996, Bob initiated the legislation that created the Arizona Telemedicine Program. He became the first Chair of the Telemedicine Council and continues to serve in that capacity. In the past, Bob has sponsored an in-line rollerblade hockey team, sponsored and coached numerous Summer Baseball League teams, and held membership in the Arizona, Phoenix, and Glendale Chambers of Commerce.

Bob Burns was born and raised in Rolfe, Iowa. He and Gayle have been married for 57 years, and have two sons, five grandchildren, and seven great-grandchildren.



Commissioner Boyd Dunn (R)

Commissioner Boyd Dunn was elected to the Arizona Corporation Commission in November 2016. Dunn has a long resume serving the public. He is a retired Superior Court judge, is a former Mayor of the City of Chandler, and served as an Assistant Attorney General. During 2016, he served on the Commission of the Arizona Power Authority.

"The role of Arizona Corporation Commissioner is very similar to that of a judge, to be an impartial decision-maker based on the facts presented to you on each individual case, regardless of personal feelings or outside influences," said Dunn. "That is how I ran my court and that is how I will serve as Commissioner."

Dunn built a successful private practice for over 32 years, most recently with Yarbrough, Moll, and Dunn in Chandler. Dunn served on numerous boards of directors for regulatory authorities, nonprofits, and service organizations. He has served as the treasurer of the Arizona Judges Association since 2011. He spent 24 years working in city government, with 16 of those years as an elected official, serving as Mayor, Vice Mayor, and City Council member for the City of Chandler. He was President of the League of Arizona Cities and Towns, served on the Maricopa Association of Governments executive committee and the Valley Light Metro Rail Board, and was a charter member of the Greater Phoenix Economic Council.

A Valley resident for more than 47 years, Dunn graduated from law school at Arizona State University and has been a leader with a strong commitment to the community. He has served on the Board of Directors for the Chandler Boys and Girls Club, as well as the United Way, and has been active in working with the Child Crisis Center, Ojo Rojo Lions Club, and Rotary Club. Dunn has been married to his wife, Nancy, for over 33 years. They have two sons, Andrew and Kevin.



Commissioner Sandra Kennedy (D)

Sandra Kennedy started her public service when she was elected to the Arizona House of Representatives in November 1986, where she served for six years. During her tenure as a House member, she co-authored and introduced with fellow member Patty Nolan Arizona's first Domestic Violence Bill. She found that in working across the aisle many issues could be accomplished with bi-partisan support and the people of Arizona would benefit greatly.

In 1992, she ran successfully for a seat to represent her District in the Arizona State Senate, where she served for three terms.

Sandra has always been a strong voice for those she represents, never shy about being outspoken. Some of her accomplishments include the following: sponsoring legislation that was signed into law regarding Domestic Violence Shelters, Foster Care Placement, the Pre-Natal Care Education Fund, and City Powers regarding Fair Housing. Concurrent with her stint in the legislature, Sandra was elected to serve on the Phoenix Union High School Governing Board for a four-year term in 1990. Governor Mofford appointed her to the Arizona Employment and Training Council.

Sandra was first elected to the Arizona Corporation Commission in 2008 on a platform of promoting solar energy in Arizona, and as a fierce consumer advocate. In her first term at the Arizona Corporation Commission, she worked with the Republican majority led by Kris Mayes to advance Solar Energy and Energy Efficiency. She is the first and only African American in Arizona to hold statewide office and the first statewide elected official, west of the Mississippi.

Sandra was re-elected to the Arizona Corporation Commission in 2018 on a platform of restoring integrity and transparency to the Commission, lowering unjustified utility rate increases, and creating more solar and renewable energy in Arizona, especially roof top solar.

Her many past and present community and civic projects include: Tutor, Valley Christian Center and Valle Del Sol (grades 5-8); Board member, Arizona Cactus Pine Girl Scout Council; ex-Officio Member, Phoenix Community Alliance; Board member, Community Excellence Project; Member, First Institutional Baptist Church.

Sandra was voted Outstanding Young Woman of America for 1984. She is a member of the National Association of Female Executives, was a delegate to the Foreign Relations Conference in June of 1988 for the American Council of Young Political Leaders in Washington, D.C., a member of the National Conference of State Legislators, and a member of the National Association of Regulatory Utility Commissioners.

Sandra is a wife, mother and grandmother.



Commissioner Justin Olson (R)

Commissioner Justin Olson was appointed to the Commission by Governor Doug Ducey in October 2017.

Commissioner Olson began his public service in the Arizona State House of Representatives where he served from 2011 to 2017. During his tenure in the House of Representatives, Commissioner Olson chaired the House Appropriations Committee and the Federalism and Fiscal Responsibility Committee. He also served on the House Ways and Means Committee, the Government and Higher Education Committee, and the Employment and Regulatory Affairs Committee.

In addition to his public service, Justin's private sector experience includes working as a tax analyst for the University of Phoenix, processing corporate income tax returns.

Prior to running for office, Justin advocated for taxpayer friendly policy at the state and local level as a Senior Research Analyst for the Arizona Tax Research Association and worked on Capitol Hill as a Congressional Aide for Arizona Congressmen Trent Franks.

Justin is a native of Arizona, where his family's roots go back many generations. He was born and raised in Mesa, where he and his wife Karyn are currently raising their five boys and four girls.



Commissioner Lea Márquez Peterson (R)

Commissioner Márquez Peterson has been an entrepreneur in our community for many years and served as the President/CEO of the Tucson Hispanic Chamber from 2009 until November of 2018. The Tucson Hispanic Chamber serves the business community in the bilingual, bi-cultural region of the Arizona-Sonora border and was recognized as the Hispanic Chamber of the Year in 2013 by the U.S. Hispanic Chamber of Commerce. The chamber represents over 1,800-member businesses and, in partnership with the Arizona Chamber of Commerce and Industry, is one of the largest chambers in the State of Arizona.

Lea ran for Congress in Arizona Congressional District 2 in 2018 and won a competitive primary race. During her campaign she was endorsed by Governor Ducey and Senator Kyl. Lea enjoyed meeting thousands of people in the region and tackling many key issues impacting Arizona.

She previously served as the Executive Director for Greater Tucson Leadership (GTL) from 2005 to 2009 and owned and operated a Business Brokerage Firm from 2005 to 2009 and a chain of six gasoline stations / convenience stores with 50 employees from 1998 to 2005 in the Tucson region.

Lea was appointed by Governor Doug Ducey to co-chair the Arizona Zanjeros, a business leadership group formed to ensure the state continues to flourish economically by driving business growth and promoting Arizona's extraordinary assets. She was selected to serve on Governor Doug Ducey's Transition Team in 2014 and co-chaired the subcommittee on Economic Development, Entrepreneurship, and Trade. She has also been appointed to serve on the Arizona Judicial Council, which advises the Arizona Supreme Court, and the Arizona Finance Authority, the state's bonding authority. She chairs the Board of Directors of Carondelet's St Mary's and St Joseph's Hospitals in Tucson and is the former Chair of the Pima Association of Governments Economic Vitality Committee. She serves on the Boards of the University of Arizona Foundation and the Pima County Workforce Investment Board and is the President of the National Association of Women Business Owners in Tucson. She also serves on the national board for the United States Hispanic Chamber of Commerce.

She formerly served as the Chairwoman of the Southern Arizona Business Roundtable, the Past Chair of the Southern Arizona Chamber of Commerce Alliance, the Founder and Past Chair of the Pima County Small Business Commission, and the Chairwoman of the University of Arizona Hispanic Advisory Council. She was appointed by the Obama Administration to the National Women's Business Council, where she served for three years. Lea was recognized by the National Football League with a 2015 Hispanic Heritage Award by the Arizona Cardinals, the University of Arizona Eller College with a 2014 Extraordinary Woman in Business award, the University of Arizona Alumni Association with the 2012 Distinguished Citizen Award, the 2011 State of Arizona Minority Business Advocate of the Year, the 2009

Rising Star by the Hispanic Professional Action Committee, the 2008 Business Advocate of the Year by MED Week, a 2007 Woman of Influence by Inside Tucson Business, was recognized as a 40 under 40 recipient, the Tucson Small Business Leader of the Year Award and honored with a University of Arizona Entrepreneurial Fellow award. In addition, she is a Flinn Brown Fellow and an Honorary Rotarian. She received her undergraduate degrees in Marketing and Entrepreneurship from the University of Arizona, and her Master's in Business Administration from Pepperdine University. She is married with two children.

APPENDIX 2.

**Arizona Power Plant and Line Siting Committee –
Biographies of Current Members**

Arizona Power Plant and Line Siting Committee

In 1971, the Arizona Legislature required that the Commission establish a power plant and line siting committee. The Committee provides a single, independent forum to evaluate applications to build thermal generating facilities of 100 megawatts or more or transmission projects of 115,000 volts or more in the State. The Committee was created to “provide adequate opportunity for individuals, groups interested in conservation and the protection of the environment, local governments, and other public bodies to participate in timely fashion the decision to locate a specific major facility at a specific site.”¹

The Committee consists of eleven members.² Five positions are filled by officials from state agencies and six are filled by the Corporation Commission. The current members of the Committee are:

Tom Chenal

Mr. Chenal is the designee for the Arizona Attorney General, and by statute serves as Committee Chair. Mr. Chenal has served as the Chief Counsel of the Division of Public Advocacy for the Attorney General, handling consumer protection, consumer and mortgage fraud, antitrust and environmental enforcement. Prior to joining the Attorney General’s office, Mr. Chenal was a litigator in private practice with the law firm of Sherman & Howard.

Leonard Drago

Mr. Drago is the designee for the Director of the Arizona Department of Environmental Quality (“ADEQ”). He has worked as an ADEQ ombudsman and tribal and Maricopa County liaison, as well as the Deputy Director of ADEQ’s Air Quality Division, and was formerly at Intel in an environmental role.

John Riggins

Mr. Riggins is the designee for the Arizona Department of Water Resources (“DWR”). He works as a compliance enforcement coordinator and department ombudsman at DWR and previously served as the coordinator for the Northwest Basins Planning Area.

Andrew Smith

Mr. Smith serves as the designee of the Chairman of the Arizona Corporation Commission. He is an engineering supervisor at the ACC and has also worked as an environmental program specialist for the Water Infrastructure Finance Authority of Arizona.

Karl Gentles

Mr. Gentles was appointed by the Commission to represent the general public. He is currently a partner at The Gentles Agency, which is a brand strategy, event production, and strategic communications agency. He has participated in the Greater Phoenix Economic Council and is a long-standing supporter of Democrats and their campaigns. His term expires on March 12, 2021.

¹ Historical Notes, Laws 1971, Ch. 67, § 1.

² A.R.S. § 40-260.01 (establishing the general makeup of the committee).

Patricia A. Noland

Ms. Noland was appointed by the Commission to represent the general public. She formerly served as the clerk of the Pima County Superior Court from 1998 until her retirement in 2013. Ms. Noland is also a former state lawmaker, having served in the Arizona House of Representatives from 1988-1992 and in the Arizona Senate from 1992-1996. Her term expires on March 12, 2021.

Jack Haenichen

Mr. Haenichen was appointed by the Commission to represent the general public. He previously served as Deputy Director of the Arizona Department of Commerce, and before that spent several years designing transistor devices for Motorola Semiconductor Division. His term expires on March 12, 2021.

Mary Hamway

Ms. Hamway was appointed by the Commission in 2015 to represent incorporated cities and towns. She is a long-time member of the Paradise Valley Town Council, with over 10 years of experience in local government. Her term expires on March 12, 2021.

James A. Palmer

Mr. Palmer was appointed by the Commission to represent agricultural interests. He serves on the Graham County Board of Supervisors in southeastern Arizona. His term expires on March 17, 2021.

Gilberto Villegas Jr.

Mr. Villegas was appointed by the Commission to represent counties. He is the CFO for Yuma County and is responsible for organizing and maintaining bond activity and credit ratings. His term expires on March 12, 2021.

Vacant Seat

One seat to be appointed by the Director of the Energy Office of the Department of Commerce is vacant. As of this publication, the Governor's office is considering candidates to fill the position.

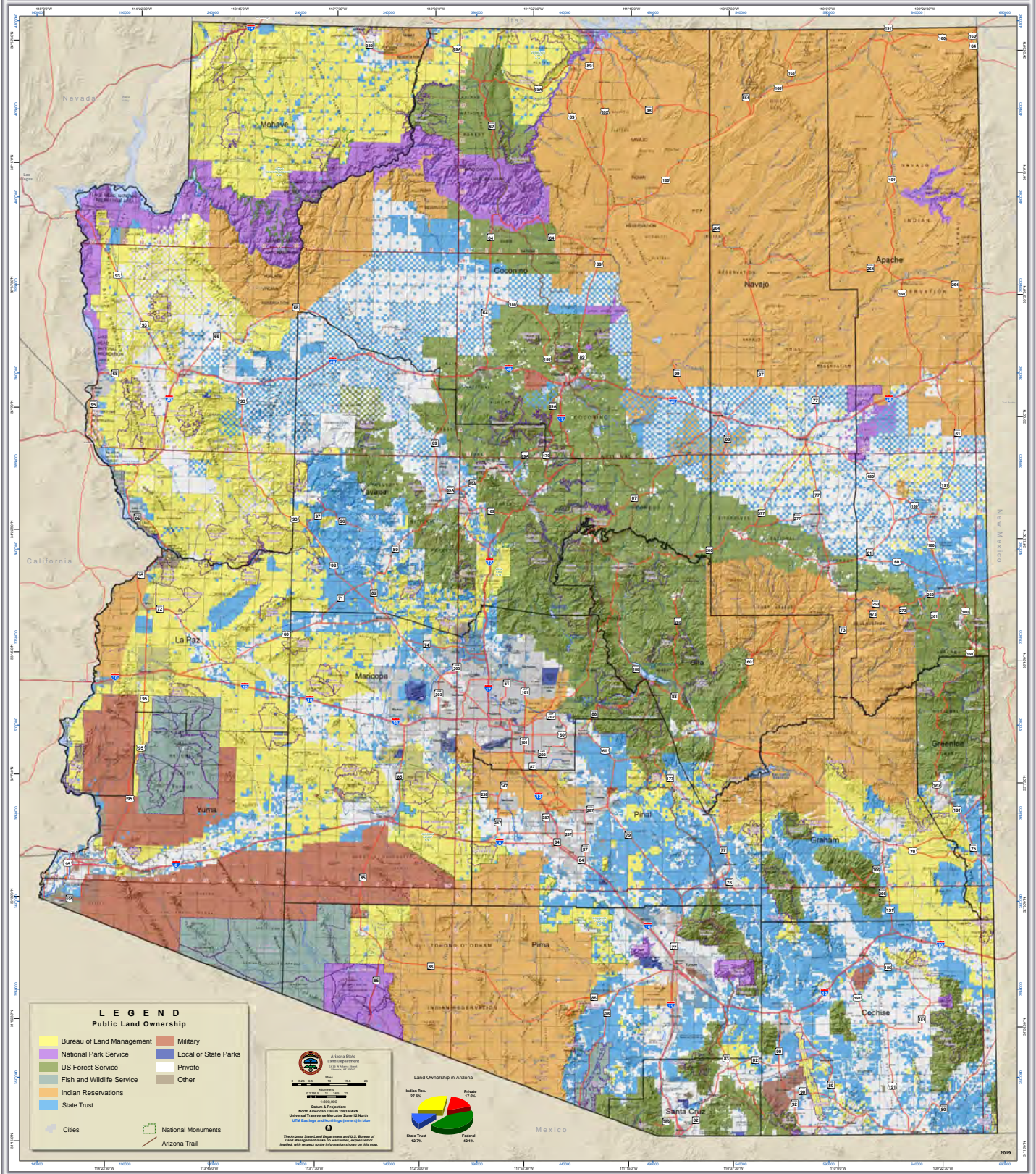
APPENDIX 3.

Map of Surface Management Responsibilities in Arizona



ARIZONA SURFACE MANAGEMENT RESPONSIBILITY

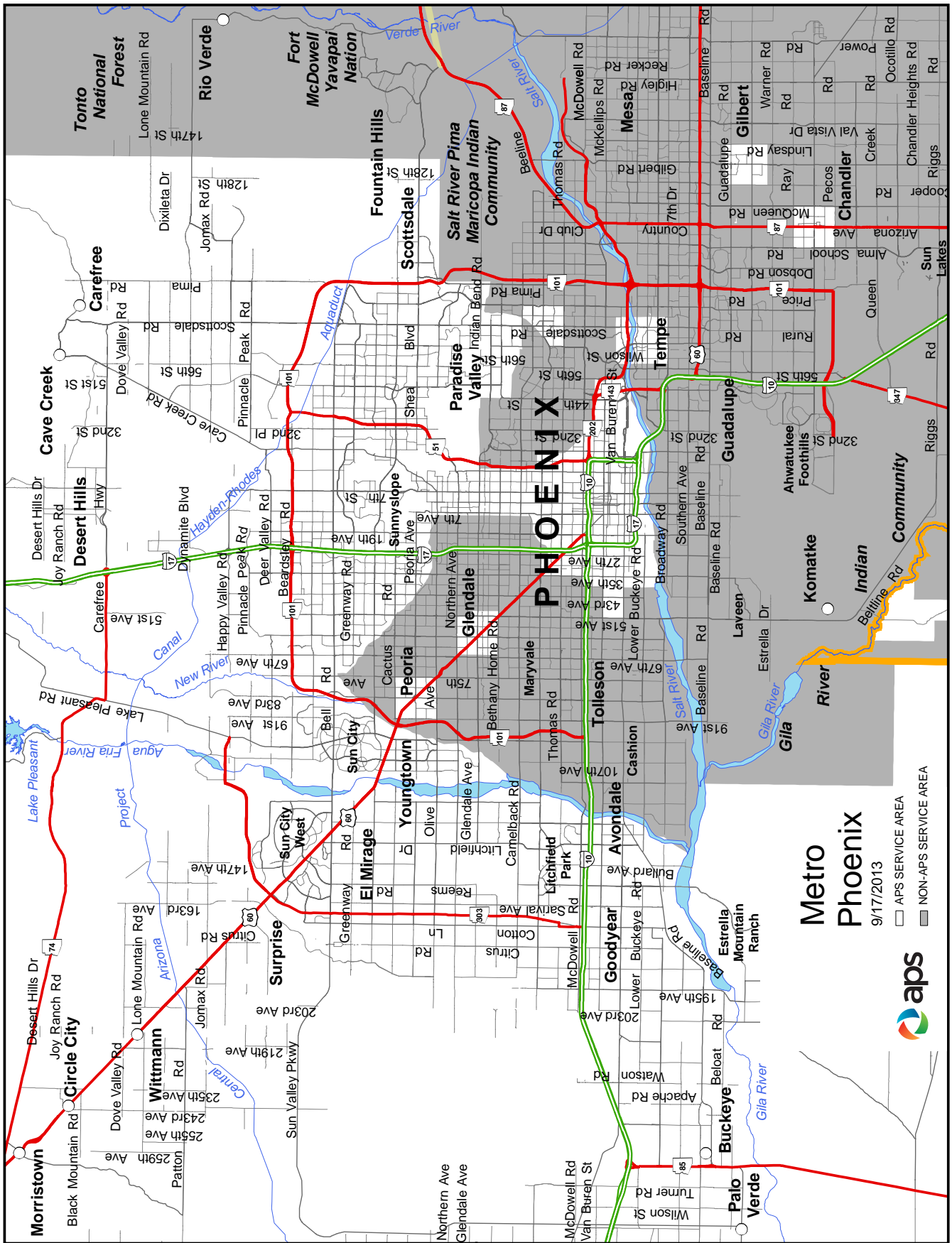
Arizona State Land Department / U.S. Bureau of Land Management
State and Federal Government Working Together



See <https://land.az.gov/sites/default/files/media/state.pdf>

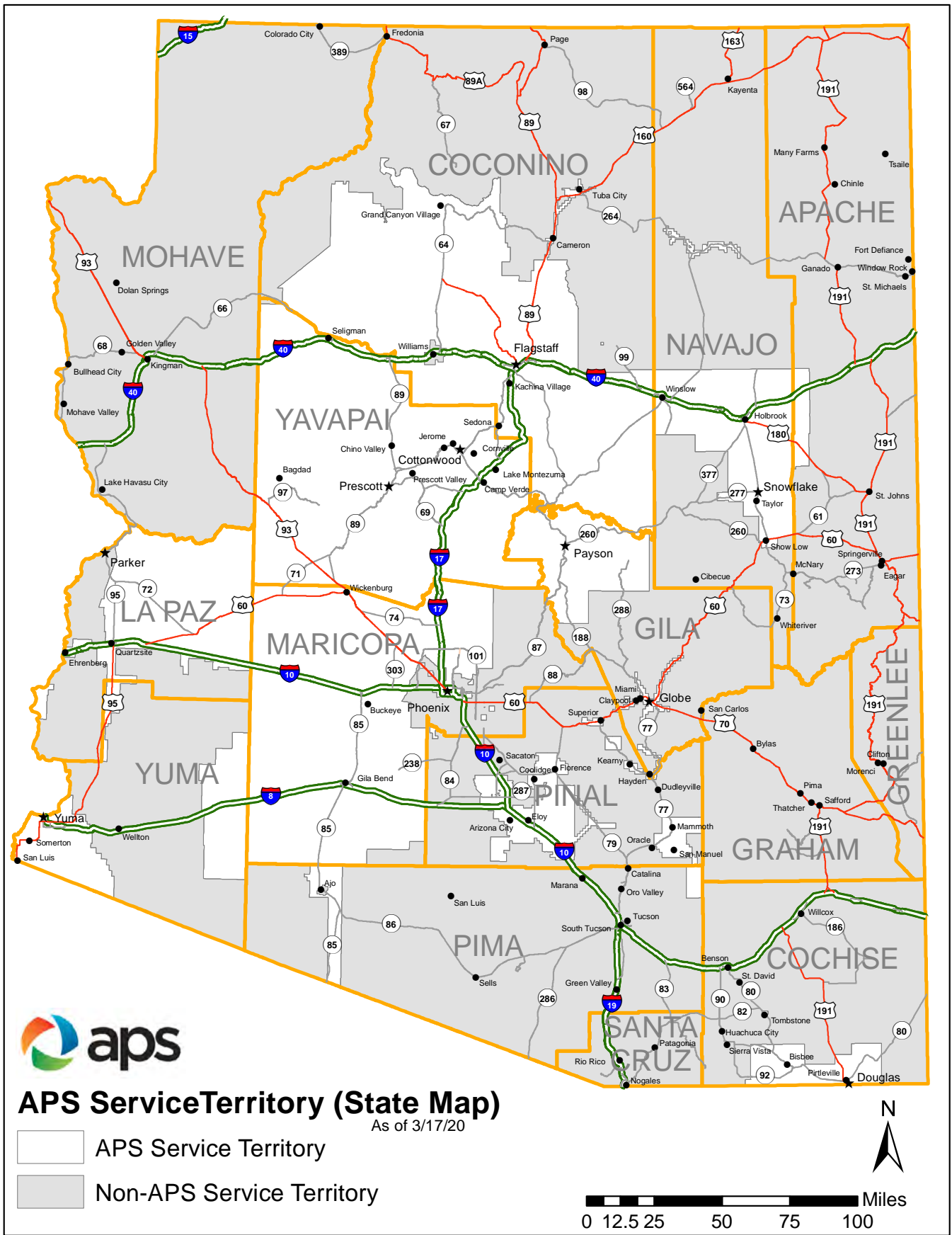
APPENDIX 4.

Maps of Service Areas of Arizona Utilities



CS#1309014

See https://www.aps.com/-/media/APS/APSCOM-PDFs/Residential/Service-Plans/Service-Territory-Map/APS-Service-Territory_Phoenix-Metro.ashx?la=en&hash=2F2B4C21A6BD081C9CD25D7F81B61CCE

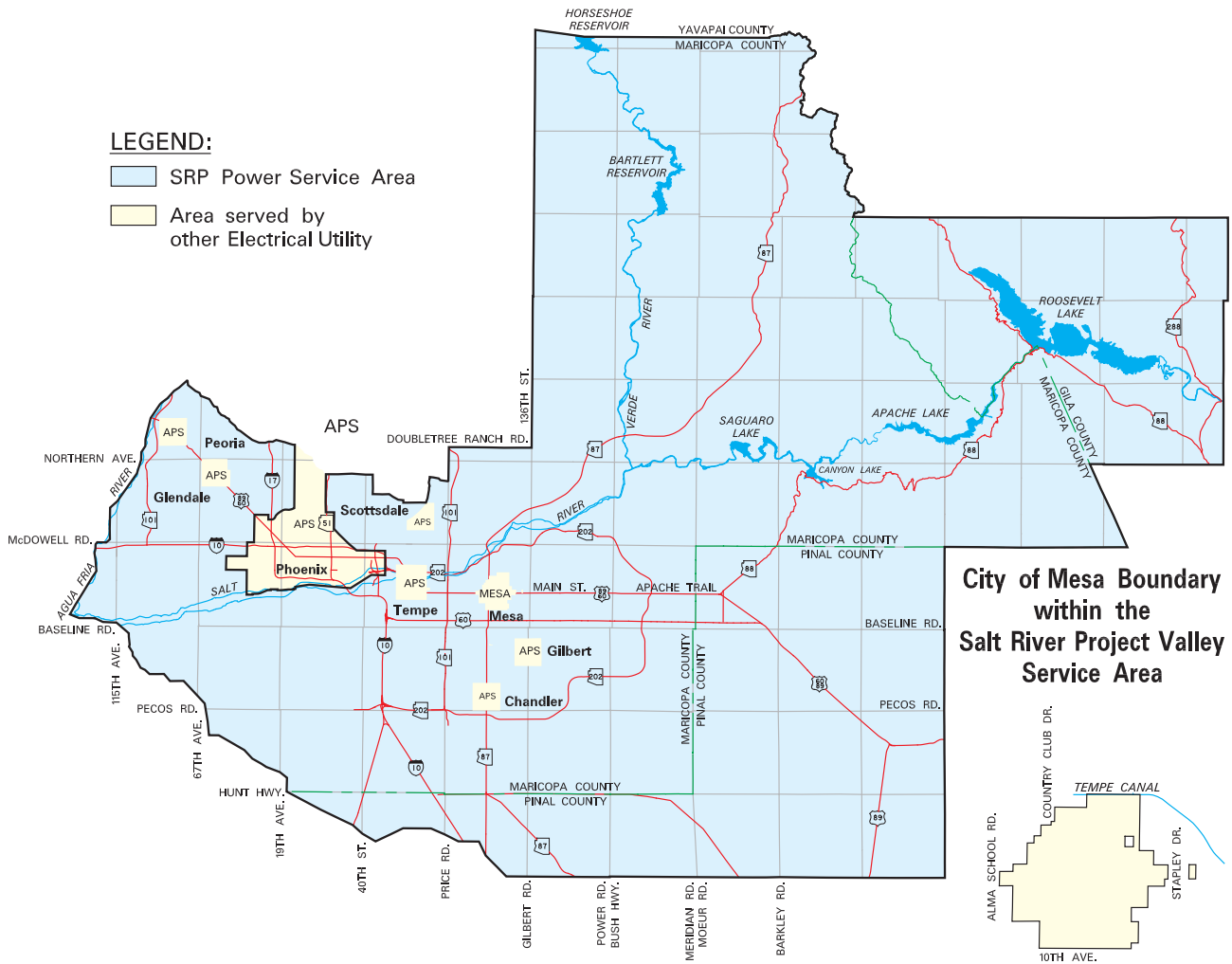


See https://www.aps.com/-/media/APS/APSCOM-PDFs/Residential/Service-Plans/Service-Territory-Map/APS_Service_Territory_Map_2017_FL.ashx?la=en&hash=45B0FCA1FDDAF5015C6A36CB693D8033

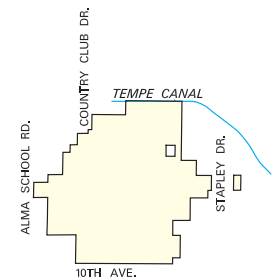
SRP ELECTRIC SERVICE AREA

LEGEND:

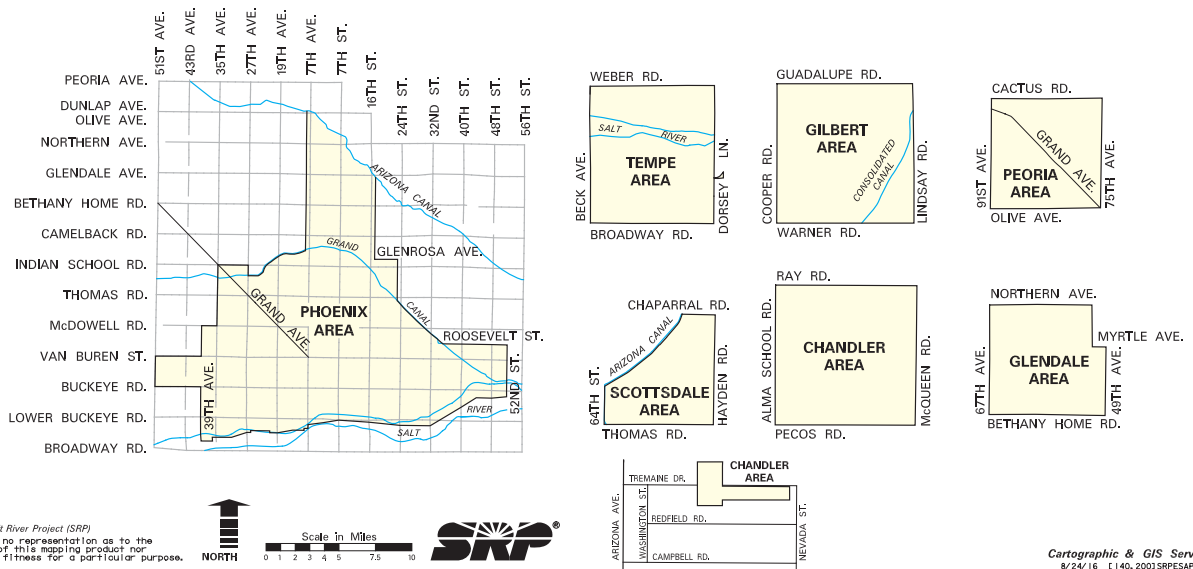
- SRP Power Service Area
- Area served by other Electrical Utility



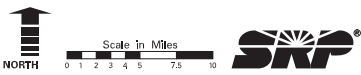
City of Mesa Boundary within the Salt River Project Valley Service Area



APS Boundaries within the Salt River Project Valley Service Area

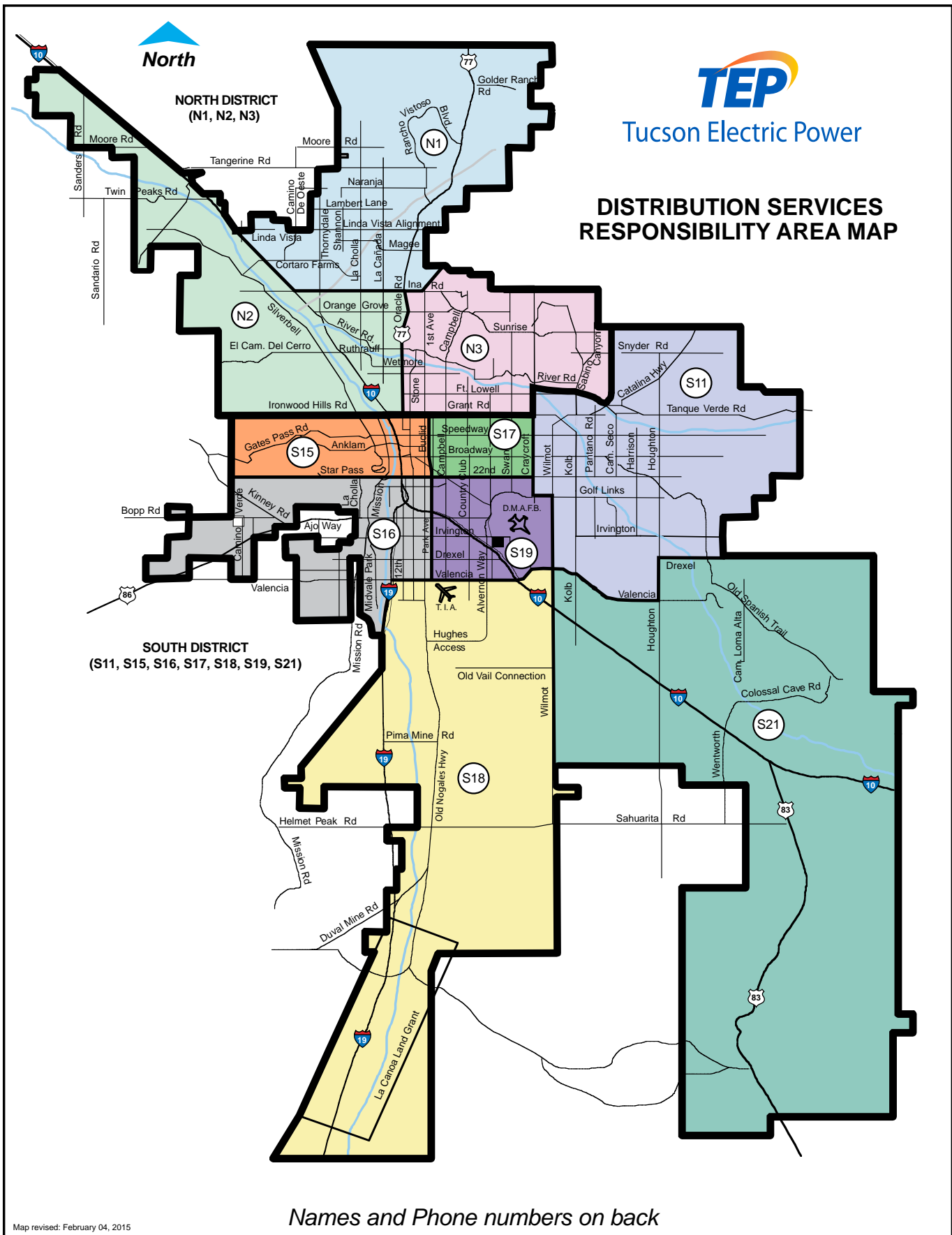


© 2016 Salt River Project (SRP)
 SRP makes no representation as to the accuracy of this mapping product nor as to its fitness for a particular purpose.



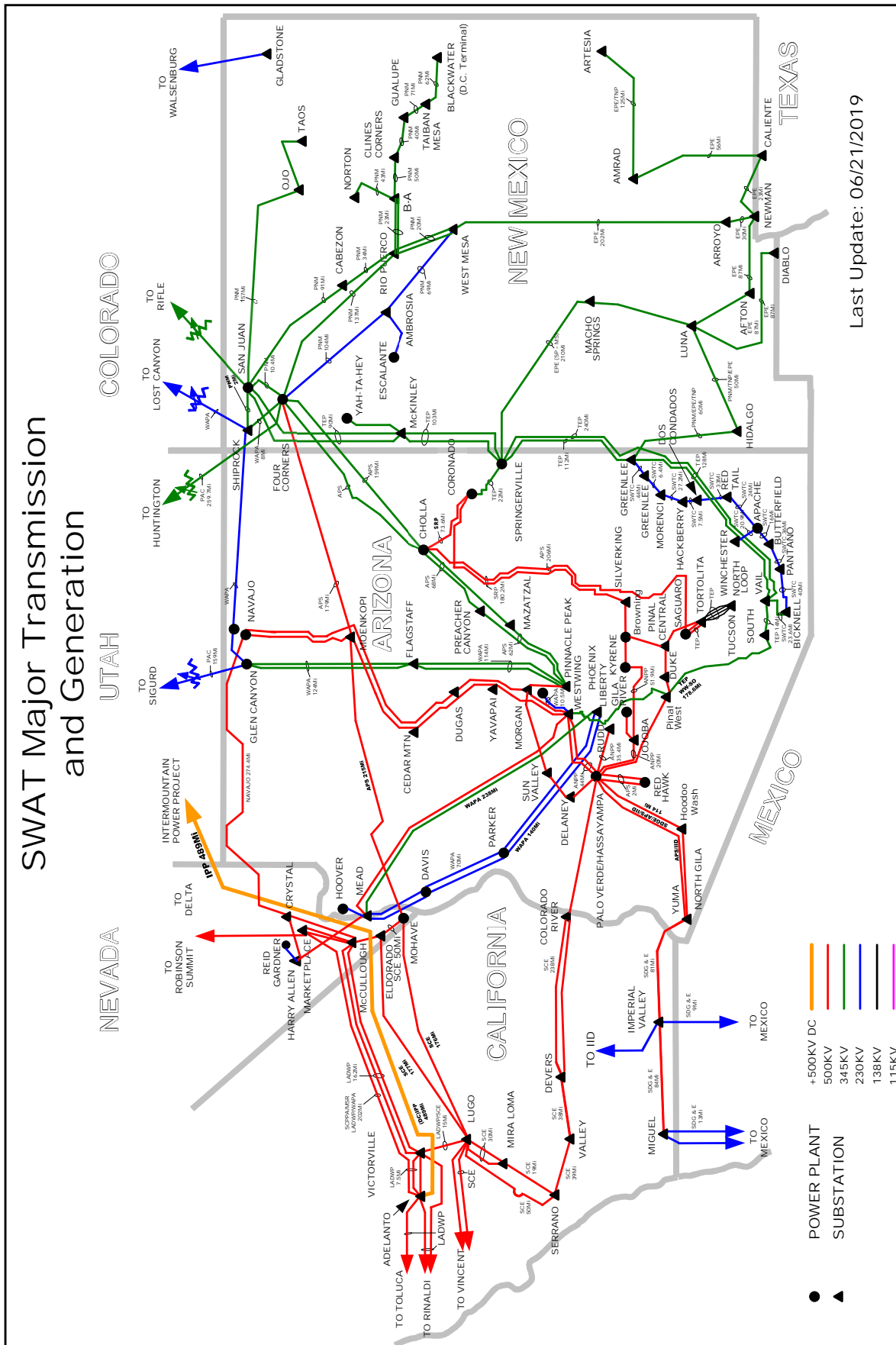
Cartographic & GIS Services
 8/24/16 1140, 2003SRPESAP_DGN

See <https://www.srpn.net/about/pdfx/ElectricServiceAreaMap.pdf>



See <https://www.tep.com/doc/tep-area-map.pdf>

SWAT Major Transmission and Generation



Last Update: 06/21/2019

See <https://doc.westconnect.com/Documents.aspx?NID=18482>

APPENDIX 5.

Using the Arizona Corporation Commission Docket

The ACC site allows you to search various dockets at <https://edocket.azcc.gov/>

Home > Search > Docket Search > Docket Details

Docket Details

L-000055-11-0059-00159

Docket Documents Decisions Case Schedule Staff Assigned Service List Linked Dockets

Docket Number
L-000055-11-0059-00159

Company Name
Perrin Ranch Wind, LLC

DBA Name

Docket Type
Line Siting Committee

Case Type
Siting Committee

Docket Status
Compliance Due

Filed Date
1/31/2011

Description
In the matter of the application of Perrin Ranch Wind, LLC, in conformance with the requirements of Arizona revised statutes §540-360, et seq., for a Certificate of Environmental Compatibility authorizing the construction of the Perrin Ranch Wind Gen-Tie and associated facilities, originating at the proposed Perrin Ranch Wind Project Substation to be located in the NW corner of section 27 or the NW corner of section 35, T24N, R1E, G&SRB&M, and terminating at the proposed step-up substation in Sec.31, T24N, R2E, G&SRB&M, both in Coconino County, Arizona.

Year-Matter
11-0059

Special Instructions
Per the Order filed on 2/2/11, L-000055-11-0059-00159 is now consolidated with L-00000D-11-0058-00158

After the initial search, you can then access and review various documents, decisions, the case schedule, linked dockets, etc.

Home > Search > Docket Search > Docket Details

Docket Details

L-000055-11-0059-00159

Docket Documents Decisions Case Schedule Staff Assigned Service List Linked Dockets

Document List Report

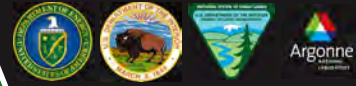
Filing Date	Description	Filed By	Filed For	Document Details	PDF
11/29/2012	Compliance to a Decision	Jeffrey W. Johnson	Arizona Public Service Company		
12/1/2011	Compliance to a Decision	Jeffrey W. Johnson	Arizona Public Service Company		
8/12/2011	Compliance to a Decision	Jeffrey W. Johnson	Arizona Public Service Company		
7/19/2011	Consumer Comments - In Support	Matt Gomes	Perrin Ranch Wind, LLC		
7/18/2011	Compliance to a Decision	Matthew L. Rojas	Perrin Ranch Wind, LLC		
5/31/2011	Correspondence - Miscellaneous	James R. Lara			
4/25/2011	Transcript	Arizona Reporting Service, Inc. - Court Reporters			
4/15/2011	Notice of Filing - Miscellaneous inactive	John Foreman, Chairman, Siting Committee - A.G.'s Office			
4/15/2011	Notice of Filing - Miscellaneous inactive	John Foreman, Chairman, Siting Committee - A.G.'s Office			
4/15/2011	Decision	A.C.C. (#72267)			
4/15/2011	Decision	A.C.C. (#72268)			

APPENDIX 6.

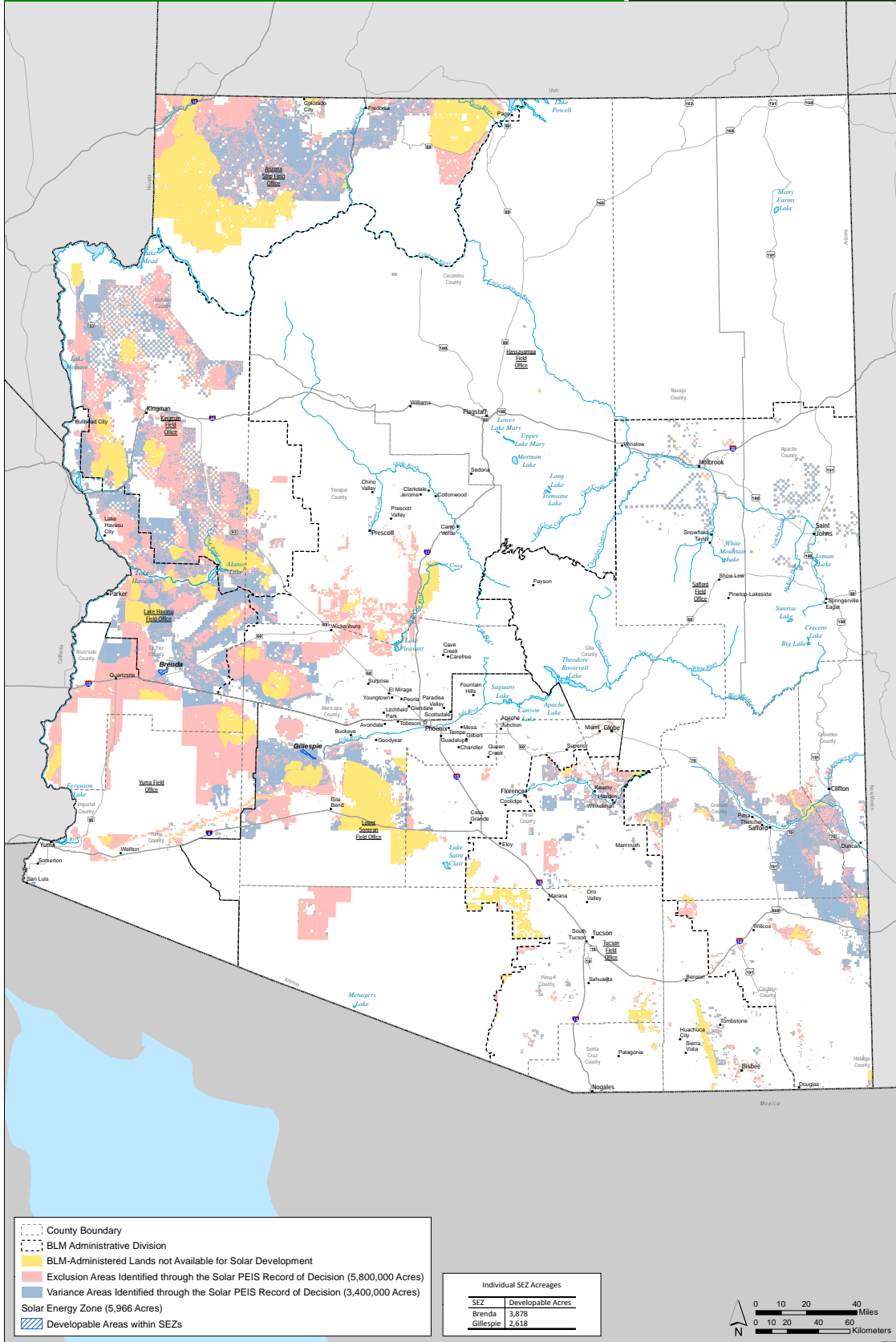
Map of Arizona's Solar Energy Zones

Land Use Allocations in Arizona as a Result of the Solar PEIS Record of Decision

Data from Solar PEIS, July 2012



Property of the U.S. Departments of Energy and the Interior. Used in preparation of their Final Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States.



See https://solareis.anl.gov/documents/rod/maps/allocations/Solar_PEIS_ROD_AZ_map_poster.pdf

APPENDIX 7.

Matrix of Potentially Required Permits and Approvals

Potentially Required Permits and Approvals

This chart summarizes major federal and state environmental requirements that may apply to Arizona renewable energy and transmission line projects. It does not include permits and approvals related to aviation; telecommunications; county land use, zoning, or building requirements; or permits related to construction such as storm water, dust-control, or transportation-related permits.

Federal Requirements

Authority/ Requirement	Regulating Entity	Legal Requirements	Notes on Requirements
National Environmental Policy Act 42 U.S.C. § 4321 et seq.	Federal agency providing a federal nexus (e.g., federal permit, federal funding)	<ul style="list-style-type: none"> NEPA requires federal agencies to complete an environmental review prior to undertaking a “major federal action” that may “significantly” affect the quality of the human environment. The nature of the review depends in part on the proposed action. If a “categorical exclusion” applies, then the review is concluded. If a relatively less burdensome “environmental assessment” results in a “finding of no significant impact,” the review is concluded. If not, then a more exhaustive “environmental impact statement” is required. 	<ul style="list-style-type: none"> The Council on Environmental Quality (“CEQ”) guidelines at 40 C.F.R. Parts 1500-1508 apply to all federal agencies, which in turn have their own guidance. The agency decision is ultimately embodied in a “record of decision.” Crossing either federal or tribal land typically triggers NEPA review.
Clean Water Act Section 404 33 U.S.C. § 1344	Corps	<ul style="list-style-type: none"> Prohibits unpermitted discharge of dredge or fill material into “waters of the U.S.” Ephemeral features like dry washes and arroyos are excluded from the definition of waters of the U.S. (WOTUS) under the Trump Navigable Waters Protection Rule. See The Navigable Waters Protection Rule: Definition of “Waters of the United States,” 85 Fed. Reg. 22250, 22288 (Apr. 21, 2020). 	<ul style="list-style-type: none"> Uncertainty is frequently the biggest problem here. Seeking a jurisdictional delineation from the Corps can be time-consuming. Most developers rely on the analysis of their own expert consultant for defining non-obvious waters. Nationwide permit(s) potentially available if no substantial disturbance of waters of the U.S.
Clean Water Act Section 401 13 U.S.C. § 1341	ADEQ	<ul style="list-style-type: none"> State certification of compliance with water quality requirements and standards. 	<ul style="list-style-type: none"> If a 404 permit is required, state 401 certification will also be required.

Authority/ Requirement	Regulating Entity	Legal Requirements	Notes on Requirements
Section 106, National Historic Preservation Act 54 U.S.C. § 306108	Arizona State Historic Preservation Office (SHPO) ASLD	<ul style="list-style-type: none"> • Must “take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register.” 54 U.S.C. § 306108. • An undertaking is any federal or federally assisted project (including any project where a federal permit is required). • The lead federal agency must consult with the State Historic Preservation Officer to determine the effect of the project. 54 U.S.C. § 302303. 	<ul style="list-style-type: none"> • Federal nexus is required. • ASLD is responsible for managing cultural resources on State Trust land. • Importantly in the West, requirements may apply not only to old buildings and the like, but also “traditional cultural properties” in the form of historically significant landscapes.
Oil Pollution Act/Clean Water Act § 311(j)(1) (C) 33 U.S.C. § 1321 33 U.S.C. § 2701 et seq. 40 C.F.R. § 112	EPA	<ul style="list-style-type: none"> • Spill Prevention Control and Countermeasure (“SPCC”) Plan required for oil-storing or consuming facilities of a certain size that might reasonably be expected to discharge oil into or upon navigable waters of the U.S. or adjoining shorelines or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the U.S. 40 C.F.R. 112.1. 	<ul style="list-style-type: none"> • Can apply to substations depending on location and oil use/storage.
Migratory Bird Treaty Act 16 U.S.C. § 703 et seq.	USFWS	<ul style="list-style-type: none"> • Unless permitted by regulations, unlawful “to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell...offer to purchase, purchase...ship, export, import... transport or cause to be transported...any migratory bird, any part, nest, or eggs of any such bird, or any product... composed in whole or in part, of any such bird or any part, nest, or egg thereof.” 16 U.S.C. § 703. 	<ul style="list-style-type: none"> • Required if migratory birds, their eggs, or active nests could be harmed by facility construction or implementation.

Authority/ Requirement	Regulating Entity	Legal Requirements	Notes on Requirements
Bald and Golden Eagle Protection Act 16 U.S.C. § 668 et seq.	USFWS	<ul style="list-style-type: none"> • Unlawful to “at any time or in any manner” “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import” any bald or golden eagle, alive or dead, “or any part, nest, or egg thereof,” unless it is in compliance with a valid permit. 16 U.S.C. § 668. • “Take” also defined by statute to include “disturb,” which is defined by rule. 16 U.S.C. § 668(c), 50 C.F.R. 22.3. 	<ul style="list-style-type: none"> • Required if eagles, their eggs, or nests could be harmed by facility construction or implementation. • Permits are available for taking of an “inactive” golden eagle nest during a resource development or recovery action. 50 C.F.R. § 22.25. • Permits also available where take is necessary to protect an interest in a particular locality (subject to other requirements). 50 C.F.R. § 22.26. • Regulations advise that a person “coordinate with the Service as early as possible for advice on whether a permit is needed.” 50 C.F.R. § 22.26. • Provides for civil penalties regardless of intent, but act must be “knowing” or “with wanton disregard” for consequences for criminal penalties to apply; need not be a “direct” take--e.g., failure to install inexpensive protective equipment on power poles could result in liability. United States v. Moon Lake Elec. Ass’n, 45 F. Supp. 2d 1070 (D. Co. 1999).

Federal Requirements Presumed NOT to Apply

Authority/ Requirement	Regulating Entity	Legal Requirements	Notes on Requirements
Clean Water Act Section 402 13 U.S.C. § 1342	ADEQ	<ul style="list-style-type: none"> Discharge of pollutant to waters of the U.S. requires permit. 	<ul style="list-style-type: none"> Presumed not to apply (other than storm water permit for construction).
Clean Air Act (and related state requirements) 42 U.S.C. § 7401 et seq. A.R.S. § 49-401 et seq.	ADEQ or delegated County authorities	<ul style="list-style-type: none"> Air pollutant emission sources may require operating permits, compliance with State Implementation Plan, etc. 	<ul style="list-style-type: none"> Is a huge issue for conventional power generation but typically not for renewable facilities and gen-ties, other than minor permits needed for construction. General permits available for certain categories of sources (rock crusher, concrete batch plant, generators) Generators may be exempt from permit requirements depending on size