

Strategies for Renewable Energy Projects on Arizona's State Trust Lands

Peter W. Culp and Jocelyn A. Gibbon

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Abstract

Solar development firms have identified over half a million acres in southwestern Arizona as possible sites for future electric generation facilities. The region is a prime target for such facilities thanks to the sunshine and state mandates to increase renewable energy production. As a major landholder in the state, the Arizona State Land Department is well positioned to benefit from this boom in solar development. However, a series of court decisions and statutory requirements constrain the ASLD's ability to rapidly proceed with solar energy projects on their land holdings. This working paper explores those opportunities and constraints, and offers five strategies for enabling the ASLD to successfully compete and benefit from the renewable energy boom in the western United States.

About the Authors

Peter Culp practices in the environmental, water and natural resources, and federal Indian law areas. His experience includes representing various industrial and municipal clients with regard to facility siting, permitting, regulatory compliance and environmental cleanup matters arising under the major federal and state environmental laws; representing private, public and nonprofit entities in matters related to surface water rights, groundwater rights, state and federal water policy and the Law of the Colorado River; and representing both private land developers and public entities with regard to land development and master planning projects, development rights and the management, development and conservation of state trust lands. Peter also has experience representing clients interacting with tribal entities or doing business on tribal lands.

His previous experience includes serving as a law clerk in the Indian Resources Section of the US Department of Justice, Environment and Natural Resources Division and as a lawyer for the Sonoran Institute, a nonprofit organization that works on land and water policy issues throughout the intermountain West.

Peter is the author of many published articles and reports on environmental, water and natural resource policy issues. These include a wide range of publications related to Western water law and the Law of the Colorado River. Mr. Culp is a member of the State Bar of Arizona and the American Bar Association. He was appointed by Arizona Governor Janet Napolitano to the Colorado River Advisory Commission, where he has served since 2004, and has also served on Arizona's State Water Advisory Group since 2006. He also serves on a binational commission under the US Department of State, International Boundary and Water Commission, which is working to develop new binational cooperative strategies for the management of the Colorado River. Mr. Culp additionally serves on the board of the Arizona Heritage Alliance and recently served as a member of the YDP/Cienega de Santa Clara Working Group, which worked to develop a successful solution to the ongoing binational controversy over the proposed operation of the Yuma Desalting Plant.

Squire, Sanders, and Dempsey
1 East Washington St., Suite 2700
Phoenix, AZ 85004
(602) 528-4000
Fax: (602) 253-8129
pculp@ssd.com

Jocelyn Gibbon's practice focuses on environmental and natural resource law, with an emphasis on water rights and water policy issues. Her experience includes representing corporate, industrial, municipal and public interest clients on matters related to environmental compliance, permitting, water rights, policy analysis, water supply and land-use issues.

Jocelyn's representative experience includes the following:

- Representing one of Arizona's largest developers with regard to water rights transfers, water supply planning and permitting, and related environmental matters.
- Representing a leading land development and investment company in the development of a major proposed transbasin water diversion and supply project.
- Representing a leading nonprofit organization in efforts to restore the Colorado River Delta ecosystem and development of basin-wide conservation planning for the Colorado River.
- Representing a publisher of educational materials in matters related to Consumer Product Safety Improvement Act compliance.
- Representing clients in litigated and non-litigated Superfund matters involving the impacts of lead, PCBs, solvents and other hazardous substances on soil and groundwater.
- Developing a reform proposal for state and regional groundwater regulation in the context of one of the United States' largest regional aquifers.

Squire, Sanders, and Dempsey
1 East Washington St., Suite 2700
Phoenix, AZ 85004
(602) 528-4000
Fax: (602) 253-8129
jgibbon@ssd.com

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Strategies for Renewable Energy Projects on Arizona's State Trust Lands

Executive Summary

Solar development firms have identified over half a million acres of land in southwestern Arizona as possible sites for future electric generation facilities. The region is a prime target for such facilities thanks to brilliant sunshine and a state mandate to increase renewable energy production.

As a major landholder in the region, the State of Arizona is poised to benefit from this boom in solar energy. State trust land holdings in southwestern Arizona are over 1.5 million acres, and much of this land is suitable for solar development. As stewards of these state trust lands, and with a legal and fiduciary obligation to maximize returns to beneficiaries of the trust, the Arizona State Land Department (ASLD) has a critical interest in the possible development of solar energy in the state. It should be noted that the area needed for the state's anticipated solar energy industry over the next 10 years is substantially less than the half-million acres now being considered. As a result, there is likely to be competition among landowners to secure deals for the most desirable solar facilities.

The other major holders of developable land in southwestern Arizona are the federal Bureau of Land Management (BLM), with over 6.5 million acres, and the many private owners, who own a total of more than 500,000 acres. This paper explores the relative strengths and weaknesses of each of these three landowners in their abilities to attract solar energy producers.

A series of court decisions and statutory requirements constrains the ASLD's ability to rapidly profit from solar energy sites, but in other areas the state holds a competitive advantage over the BLM and private landowners. The state's ability to sell or lease many parcels at once, for example, provides an advantage to a developer who otherwise would need to negotiate individually with many private landowners. The state also has some competitive advantages over BLM. Solar energy facilities constructed on BLM land will be subject to rigorous federal requirements, which generally do not apply on state land.

In light of the legal constraints on ASLD, five strategies are suggested for capitalizing on the department's strengths and maximizing its benefits from solar energy development:

1. Stimulating interest in solar energy projects on state trust lands by conducting a comprehensive inventory of which parcels are most suitable for such projects.
2. Incentivizing further solar investigation of state trust lands by issuing special use permits in advance of a structured auction of those lands.
3. Expediting the sale of identified sites.
4. Issuing commercial leases of 10 to 99 years for identified sites.
5. Development of a participation mechanism which would auction land at lower prices, but allow the state to receive a share of revenues from the completed project.

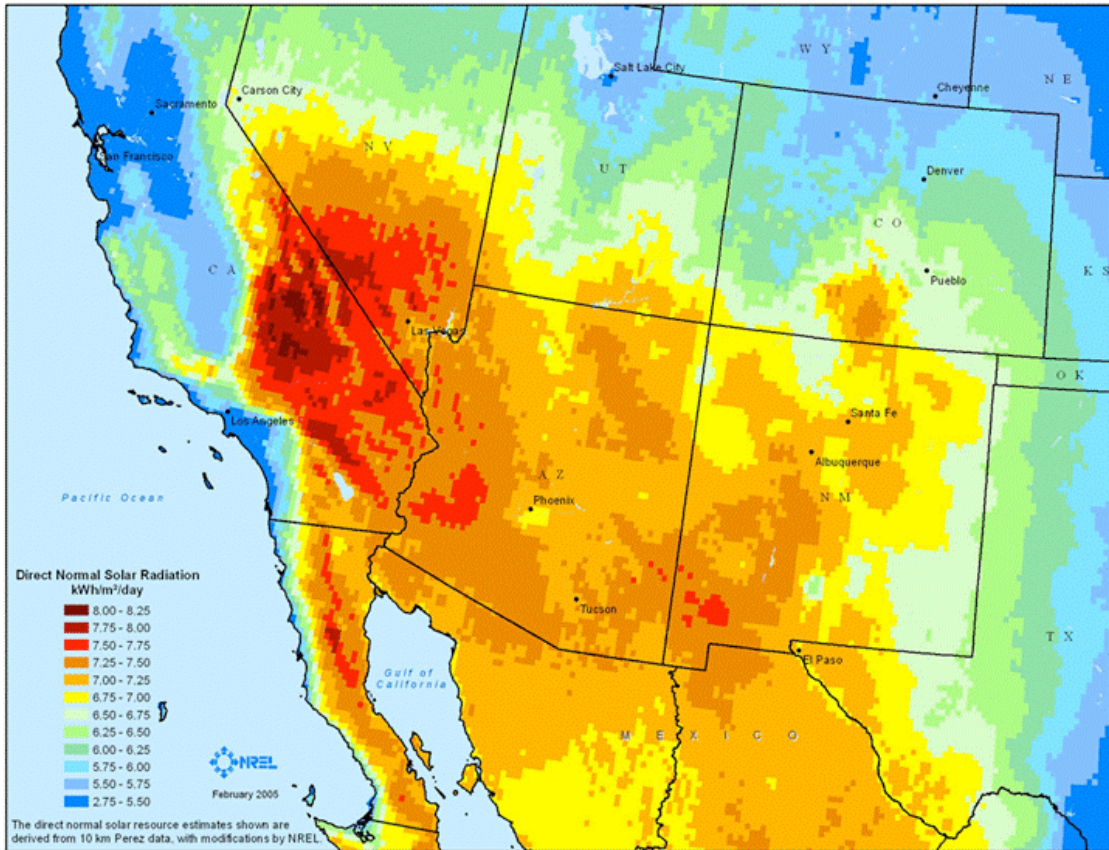
The availability of land is only one of a series of critical factors in successful solar energy development. Arizona's solar energy program is more likely to stand or fall depending upon the influence of other factors, such as financing and tax incentive programs, regulatory requirements and incentives, and other constraints, including environmental requirements and transmission access. An assessment of successful programs and/or best management practices among state land departments and other state regulators might be helpful in assessing how best to support solar energy development on state trust lands, as well as identifying useful practices that could translate to other states. ASLD appears to have already engaged in substantial mapping exercises designed to highlight solar opportunities on state trust lands and to identify potential environmental and physical constraints on solar siting – a practice that could be replicated by other state land managers around the West.

Background

Arizona has a well-deserved reputation as the solar capital of the U.S. As a review of a map of solar energy potential in the southwestern U.S. demonstrates (*see* Figure 1), Arizona is home to an enormous concentration of high quality solar resources. Perhaps just as importantly, these solar resources are located near existing transmission corridors, close to growing population and demand centers, and occur within vast state and federal land holdings that are critical to enabling successful energy development.

Arizona currently produces close to nine million megawatt-hours (MWh) of electricity each year, primarily from fossil-fuel-fired generating plants. However, in spite of its high renewable energy potential, Arizona's current energy mix includes a relatively small amount of renewable generation. (Figure 2 illustrates the primary sources of electricity generated by source as of July 2007.) Notably, renewable energy provides only 6 percent of Arizona's power - and this figure includes Arizona's significant hydropower production from the massive generating plants on the Colorado, Salt, and Verde river systems.¹ However, as Arizona continues to grow, electricity demand in the state is anticipated to increase by 20 million MWh over the next decade, and by over 50 million MWh through 2030.² In light of these figures and growing concern over greenhouse gas emissions, greater exploitation of Arizona's solar energy potential is not only desirable, it is inevitable.

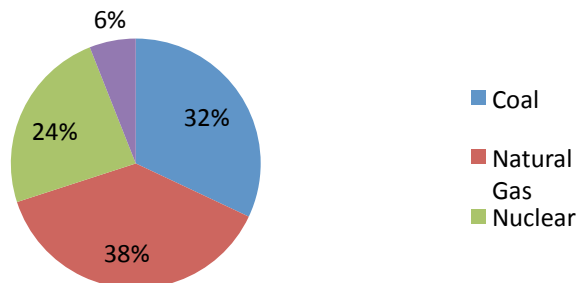
Figure 1: Arizona's Solar Energy Potential



Source: National Renewable Energy Laboratory, October 2006.

Figure 2: Arizona's Energy Mix – July 2007

Arizona's Energy Mix



Source: Department of Energy, EIA Electric Power Monthly October 2008.

The economic benefits that could be associated with these resources are widely recognized. According to the Arizona Corporation Commission, development of 1 gigawatt of solar energy through concentrated solar power (CSP) could lead to \$2-4 billion in private investment, nearly 4,000 jobs, and \$500 million in state tax revenues.³ Even more modest efforts would yield significant benefits. Recommendations from the Western Governor's Association's Solar Task Force 2006 report have suggested that Arizona can achieve considerable cost reductions and stimulate in-state business growth by developing only 1,400 megawatts of solar energy.⁴

The biggest barriers cited to widespread development of solar resources are the initial system expenses, the ability of large-scale projects to attract investment and financing, and production capacity for manufacturing components needed for installation of utility-scale solar facilities.⁵ Although Arizona has issued permits for the construction of several large-scale solar facilities, a utility-scale solar plant has yet to be brought online in the state largely as a result of these barriers.

Regardless, over the past decade, there has been significant progress toward jump-starting development of solar and other renewable energy sources in Arizona. Arizona's Climate Change Action Plan, released in August of 2006, outlined specific recommendations for state regulators, including setting a goal of reducing state greenhouse gas emissions to 2000 levels by 2020, and to 50 percent below 2000 levels by 2050 – an aggressive emissions reduction goal.⁶ The plan recognized the importance of diversifying Arizona's energy mix in meeting that goal; promoting exploitation of renewable energy resources, including a more stringent environmental portfolio standard, and reducing barriers to distributed generation were among the strategies recommended to meet the greenhouse gas emissions reduction goal.⁷

Renewable Energy Standards in Arizona

In October 2006, the Arizona Corporation Commission made good on at least a portion of these recommendations by approving rules requiring state-regulated utilities to generate 15 percent of their total energy from renewable resources by 2025, a significant increase over the previous renewable portfolio standard of 1.25 percent.⁸ This renewable energy standard (RES) would also require that 5 percent of the energy generated to meet the standard be from distributed generation from residential or non-utility owned installations; this percentage would grow to 30 percent after 2015.⁹

Later, in January 2007, the Arizona Department of Commerce developed a 10-year plan for promoting the development of Arizona's solar energy resources called the "Arizona Solar Roadmap." The Roadmap outlined five main initiatives: establishing a marketing and outreach program to incentivize solar development; establishing a "solar zone"; developing a "Solar Center of Excellence" to provide research and development on state-of-the-art and best practices; creating partnerships to stimulate market demand; and promoting construction of large-scale, centralized solar plants.¹⁰

As Arizona and other southwestern states continue to develop requirements and incentives to pursue solar resource development, opportunities are booming for large

landowners in the state. Notably, a program which opened federal BLM lands to potential solar leasing, together with federal incentives intended to subsidize renewable energy development have led to a veritable “gold rush” of energy developers and investors seeking to secure high-quality sites for major solar projects. The Arizona office of the Bureau of Land Management, which manages over 12 million acres of land in the state, has received a flood of solar siting applications due to its extensive land holdings in areas of high solar potential, with over 30 large-scale applications filed in Arizona alone (and frequent over filings, where a subsequent applicant has applied to take over a site if the initial applicant fails).

The purpose of this research is to provide the ASLD with resources and recommendations, given its current constitutional, statutory, and budgetary constraints, for improving its competitive advantage in siting solar energy facilities and realizing the potential for new, high-value revenue generation for its beneficiaries. To this end, the report describes the basic authorities for land disposal that are potentially available to ASLD to make lands available for solar development, and the various regulatory and statutory options available to ASLD for pursuing such a program.

General Siting Requirements in Arizona

The siting of solar energy facilities in Arizona embraces a series of practical considerations related to land ownership, land use, water use, and environmental regulations. Critically, these requirements can differ substantially depending on whether the proposed solar site is located on federal, state, or private lands.

Energy Project Siting Requirements - Arizona

Power plant siting in Arizona is largely regulated by the Arizona Corporation Commission (ACC), which regulates the siting of both transmission lines and most electrical generating facilities through an application and hearing process that culminates in the issuance of a Certificate of Environmental Compatibility (“CEC”).¹¹

A CEC applicant must file a plan with the ACC ninety days before filing an application for a CEC. This plan provides general information such as: (1) the size and location of the plant; (2) the estimated date of operation; (3) the average and maximum output of the plant (measured in megawatts); (4) the estimated capacity factor; (5) the fuel source; and (6) a power flow and stability analysis report showing the proposed plant’s effect on the current Arizona electric transmission system.¹² Following the submission of the plan, an application for a CEC is submitted to the Arizona Power Plant and Transmission Line Siting Committee.¹³ This committee is charged with holding public hearings and considering a host of factors to make a recommendation to the ACC, including:

- 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 public access to the site for recreational 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 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 site
- Special consideration to the protection of areas unique because of biological wealth or their status as habitats for rare or endangered species
- Compliance with all air and water pollution control standards and regulations
- Compliance with local zoning under all applicable jurisdictions.

The Siting Committee's recommendation to the ACC may include "reasonable conditions" to be included on the permit.¹⁴ Examples of some "reasonable conditions" that are likely to be imposed on solar power plants include:

- Compliance with federal environmental law and Arizona special species statutes, such as the Arizona Native Plant Law
- Compliance with instructions from the ASLD regarding treatment of 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
- Notice of the project to neighboring landowners and homeowners

It is critical to note that the CEC requirement applies only to a "thermal electric, nuclear or hydroelectric generating unit" that has a nameplate rating at or above 100 megawatts (MWs). Plants that fall below this 100 MW threshold are not regulated by the ACC. In addition, it should be noted that the "thermal" requirement additionally exempts both photovoltaic and wind-based renewable technologies from regulation.¹⁵ However, it is important to note that even if the generating plant itself is unregulated, the transmission lines associated with the facility *may* be regulated; CECs are required for transmission lines with a nominal capacity of 115 kilovolts (kV) or greater and their associated switchyards.¹⁶ In addition, it should be noted that CEC requirements apply to any regulated facility regardless of whether it is located on federal, state, or private lands in

Arizona. Most tribally-controlled lands, however, fall outside of the scope of ACC jurisdiction due to special rules governing state jurisdiction on tribal lands.

Environmental, Water, and Land Use Permitting

Solar project permitting can trigger a variety of environmental and land use regulations, depending on the nature of the technology and the site of the installation. Local land use approvals, including zoning changes, are typically required for most utility-scale projects, since the agricultural or rural residential zoning that typically applies to most ex-urban lands does not normally allow for heavy industrial applications.

Solar Energy Production and Water

Solar energy production also typically requires water. Historically, in fact, solar power production was commonly a very water-intensive operation. Water use statistics from the U.S. Department of Energy indicate that older model CSP plants can use 760-920 gallons per megawatt hour, considerably more water than a coal-fired plant's requirement of 110-300 gallons.¹⁷ Although newer technologies require much less water, locating a sufficient supply of water can create both practical and political challenges in the arid Southwest.

In addition to physical limitations, statutory and common law governing groundwater and surface water rights, as well as local water conservation policies, can compound water scarcity. Most local and regional surface water supplies in Arizona are fully allocated, leaving little to no water available for new water demand associated with energy development. Legal restrictions on groundwater use are particularly stringent in Arizona's five Active Management Areas (AMAs) – highly regulated groundwater basins located in and around most of Arizona's major population centers. In the AMAs, groundwater development can only proceed under a system of water rights and permits that carefully restricts water access. However, even in rural areas (where groundwater use is largely unregulated), the impact of a project on local water supply is a relevant consideration in the CEC process as noted above. Electrical generation projects can therefore be subject to water use controls even where other industrial applications are not.

Clean Water Act requirements will normally apply to any point source discharges of cooling water or other potential pollutants; Section 404 permitting requirements will frequently apply to projects that either cross or fill in washes and other drainage features. Arizona's Aquifer Protection Permit program also regulates many types of pollutant discharges, such as the evaporation ponds associated with cooling towers.

Disturbed Lands

The combined issues associated with the disturbance of native desert land, cultural resource concerns, and water use have tended to drive large-scale solar energy development toward agricultural lands. Because these lands are previously disturbed, they typically have little or no potential to generate concerns related to cultural resources, endangered species, and Clean Water Act/Section 404 permitting. Just as significantly, because the amount of water use associated with agriculture is typically far higher than that associated with a solar project, a solar plant can actually result in a net reduction in

water use compared to the status quo – an argument that has been used successfully in recent siting applications.¹⁸

Air Quality Issues

Projects that include any amount of backup generation capacity may trigger Clean Air Act requirements. In addition, because of widespread PM10 (particulate matter of 10 micrometers or less) issues in Arizona, there will typically be dust control and revegetation requirements associated with projects that have any substantial amount of land disturbance. Where endangered species or associated habitat is present, there can be substantial requirements associated with Endangered Species Act (ESA) compliance and/or mitigation. These requirements become substantially more involved where a federal decision (such as use of federal land) is involved, since federal agencies have greater ESA obligations than do private parties or state agencies. Projects involving land disturbance also will typically have substantial cultural resource preservation obligations, particularly if an investigation reveals the presence of archeological or historic sites.

National Environmental Policy Act

One particularly important regulation in this context is the required review and analysis of potential environmental and cultural impacts associated with the National Environmental Policy Act (NEPA). NEPA requires the United States to evaluate and provide a detailed statement on the environmental impact of any “major federal action” which causes a significant environmental impact.¹⁹ Depending on the nature and scale of the project in question, this can range from a relatively modest investigation to a full-scale analysis that incorporates impacts to air, water, land, wildlife, noise, cultural resources, and local economies, among other considerations, including analysis of alternative actions and measures to mitigate potential impacts. Although NEPA can be triggered by federal environmental permitting, it is nearly always triggered by activities occurring on federal land. (Note that solar facilities planned for development on Native American tribal lands must also undergo NEPA review, unless a tribe has entered into a Tribal Energy Resource Agreement (TERA)²⁰ with the Secretary of the Interior, in which case a tribal-specific process must be followed.)

Because of the relatively burdensome nature of the federal NEPA process, the BLM has attempted to partially streamline it by undergoing a Programmatic Environmental Impact Statement (PEIS) to evaluate the impacts of large-scale solar energy development in the West.²¹ However, the completion of the PEIS will not eliminate the need for NEPA review of particular project sites. Rather, it will simply limit the scope of necessary review to the environmental characteristics of individual sites, rather than needing to analyze larger regional and national impacts as well.

Federal NEPA requirements, taken together with the relatively cumbersome BLM leasing procedures (and the additional layers of federal environmental review that apply to federal decision-making under other statutes, such as ESA), tend to extend a competitive advantage to state trust lands and private lands compared to federal lands. In addition, there are virtually no BLM lands under agricultural lease in Arizona. Consequently, these lands are in most cases completely undisturbed, so that solar project siting will cause substantial environmental disruption requiring additional consideration and/or mitigation.

Just as significantly, these lands normally have no history of water use, so that project siting – particularly water-intensive concentrating solar technologies - involves both new analysis and new burdens on what are frequently already stressed aquifer systems.

Land Use Requirements

Both forms of solar generation, concentrated solar power (CSP) and photovoltaic (PV), often require extensive areas of land to produce utility-scale electricity. Applications for CSP plants and data from existing PV plants suggest that utility-scale CSP plants average roughly 10 acres per megawatt of electricity,²² while utility-scale PV arrays require approximately 12 acres per megawatt of electricity. With utility-scale solar applications typically targeting 250-750 megawatts (MW) per installation, utility-scale solar plants can easily cover several contiguous sections of land with mirrors or PVs. The large land areas required by these types of plants are further compounded by the transmission corridors potentially required to carry electricity from the remote areas where it is generated to the population centers where it is used.

As noted above, water use and additional environmental permitting burdens associated with the use of federal BLM lands create potential competitive advantages for trust lands and private lands as compared to federal lands for solar project siting. However, it is also important to note that a similar, albeit different set of challenges have accompanied efforts to develop private lands for utility-scale solar energy in Arizona.

Solar and Private Landholdings in Arizona

As an initial matter, although private landholdings in Arizona are substantial in comparison to many western states – around 17 percent of the total state land mass – most of the private lands located in parts of the state with the highest solar potential, even those which have not already been developed, are held in relatively small parcels. There are therefore a relatively limited number of large, contiguous blocks of private land that are both located in proximity to transmission and which have significant solar potential.

Perhaps more significantly, there are also few private landowners who control more than a handful of sites with substantial solar potential at the utility scale. As a result, while demand for sites is high among potential developers, landowners have frequently been unwilling to commit potential sites to solar developers on a speculative basis without substantial up-front compensation and long-term leasing commitments (if not requiring an outright sale). In short, private landowners are afraid to gamble their only opportunity to make a solar sale by granting a long-term option to a developer who may ultimately fail to perform. This has made obtaining private sites difficult, which has in turn driven up private land costs, with recent solar sales at or above *\$15,000 per acre* for lands with high solar development suitability.²³

More importantly, this has created a situation where solar developers – who already face substantial financing challenges in a difficult credit market – are being asked to take on much higher levels of risk in the site acquisition phase, since they cannot easily obtain an option on a potential site that can simply be dropped if a site does not work out. Instead, developers are being required to invest substantial resources in a long-term lease or

purchase of lands for a site before they obtain permits and energy purchase contracts – or else engage in far more extensive due diligence prior to site acquisition to limit their risks.²⁴

Land Competition and Arizona State Land Holdings

These federal and private challenges add up to a potentially significant opportunity for state trust lands in Arizona. The Arizona State Land Department (ASLD), which controls some 9.3 million acres of state trust land within the State of Arizona and more than 1 million acres in the vicinity of rapidly urbanizing areas, is well-positioned to take advantage of solar opportunities simply due to the sheer size of the trust portfolio. In addition, ASLD's fiduciary mandate to generate revenues for a set of specific public beneficiaries, principally public schools, reduces the potential for conflict over the use of trust lands for solar development.²⁵

Because of the unique restrictions governing the disposal of state trust lands - in particular, the requirement that trust lands be sold at public auction (discussed in detail below) trust lands have frequently been disregarded by renewable energy developers and investors. In essence, because the investigation of the feasibility of a solar site requires substantial investments of time, energy, and resources, many parties have proved unwilling to invest in a site which might ultimately be purchased out from under them by another party at a competitive auction. They also are unwilling to bid on a site and commit to a lease or sale prior to engaging in such an investigation.

However, although transactions with private parties may indeed be less complex in character as a result of the public auction requirement, ASLD-managed trust lands may actually be *more* suitable for solar development than at least those held by federal agencies – and may well be more available than lands held by private owners. Unlike ASLD, the Bureau of Land Management (BLM) is governed by a multiple use mandate that requires it to accommodate not only revenue-generating economic activities but also to protect natural resource and recreational values on the lands. As the enormous volume of public commentary on BLM's ongoing Programmatic Environmental Impact Statement (EIS) has shown – with more than 15,900 individuals, organizations, and government agencies providing comments on the program during the public scoping period alone – balancing those other considerations with the kind of large-scale industrial development that is involved in construction and operation of concentrated solar energy plants and similar facilities can be difficult.²⁶

State trust lands, by contrast, have a clear obligation to generate revenue for trust beneficiaries – a central feature of the trust responsibility. As a result, renewable energy development on appropriate state trust land sites may better serve the goals and objectives of the agency than those of other public landowners, while incurring less controversy over conflicting use expectations by public land stakeholders. In fact, since the lifespan of many renewable energy applications may be relatively short from the perspective of the trust (30-50 years), the use of state trust lands for solar development purposes could result in both significant near-term revenue generating opportunities (through the sale or lease of solar-suitable lands) as well as long-term revenue

enhancement (by providing an interim, revenue-generating use for urbanizing trust lands without compromising long-term development values).

In addition, many state trust lands are subject to existing leased uses – such as agricultural leases – that have caused previous land disturbance and/or may be accompanied by existing water uses and water rights. Combined with the far lower levels of regulation that apply to state lands (essentially the same as those that apply to private lands), state trust lands may be far easier to permit and develop than similarly situated federal lands. Finally, by siting facilities on state trust lands rather than on federal lands, the revenues generated by solar leasing or sales will go to support public schools, in addition to stimulating business investment in the state and providing a clean energy resource to meet the state’s growing energy needs.

However, while ASLD may have the land resources and incentives to expand its revenue generating capabilities and diversify its portfolio through renewable energy development, that does not mean that ASLD currently has the administrative or technical expertise to review and prioritize a high volume of siting applications for qualified applicants or successfully negotiate lease arrangements for solar facilities. Significant budget cuts have reduced staff and depleted resources that were once available to contract for consulting expertise and assistance on technical matters outside the ASLD’s scope of regular activities. Recent attempts to allow the ASLD to retain a portion of the revenues it generates to fund operations have come under fire through a constitutional challenge by public school advocates.²⁷

In addition to these administrative problems, renewable energy development on state trust lands has been complicated by the unique restrictions applicable to the management of Arizona’s state trust land portfolio – including a requirement that ASLD can only dispose of lands at public auction. However, these problems are not as insurmountable as is commonly believed.

The Trust Responsibility

A fundamental requirement of any decision undertaken by ASLD with regard to the disposition of trust lands is whether that disposition is consistent with the “trust responsibility” that attaches to trust land management. Pursuant to two decisions of the United States Supreme Court, *Ervien v. United States*²⁸ and *Lassen v. Arizona*,²⁹ the Congressional land grants to the State of Arizona under the Arizona-New Mexico Enabling Act created a trust relationship. The Enabling Act provides that any disposition of trust lands or the monies and resources derived there from in a manner contrary to the provisions of the Enabling Act “shall be deemed a breach of trust.”³⁰

Decisions interpreting the requirements of state trusts have applied a variety of the common-law fiduciary principles that govern trust administration to state trust land managers.³¹ Under the common law, the trustee is charged with a series of fiduciary duties – duties which can be either express or implied – to the beneficiary of the trust.³² The most important of these are (1) to manage the trust in accordance with the instructions of the settlor; (2) a duty of loyalty or good faith, which requires the trustee to elevate the interests of the trust beneficiaries over other considerations; (3) a duty of prudence, which requires the trustee to manage the trust property with the same degree of skill that a prudent person would exercise in her own affairs; and (4) a duty to preserve and protect the trust assets, or trust corpus, to satisfy both present and future claims against the trust.³³

Although the fiduciary rules governing the responsibilities of the state trustee are similar to those governing a private trustee, they differ in two critical respects. First, the obligations are owed to some extent to the broader public (because the trust does not benefit a discrete individual or group of individuals that are effectively separated from the larger public in the manner of a private trust). Second, the trust exists in perpetuity, since it embraces a purpose that will continue from generation to generation without a foreseeable end.³⁴ In addition, because the “trust” is established in federal law and by state constitution, and the parties are government entities whose objectives (and budgets) are defined by legislative and executive prerogatives, the obligations and considerations that apply to the trustee are much broader and necessarily embrace, at least to some extent, the political and economic concerns of the public at large.

With regard to the first requirement, a trustee generally is required to honor the purposes for which a trust is established when administering the assets of a trust.³⁵ However, absent specific instructions for how the trust is to be managed, the trustee otherwise has broad discretion in the trust’s administration and may enjoy great flexibility in the management of trust assets.³⁶ Since the purpose of the state land trust was established in the state’s Enabling Act, in the context of the Arizona state land trust, this equates to a requirement to honor the conditions of the New Mexico-Arizona Enabling Act for the administration of Arizona’s trust lands. However, the actual administration of state lands is additionally governed by the provisions of the Arizona Constitution and Arizona statutes, such that the requirements for management of state lands are more constrained than would otherwise be required by the trust.³⁷

The trustee's duty of good faith requires that the trustee act honestly and with undivided loyalty to the interests of the trust and its beneficiaries, ensuring that the interests of third parties are not placed ahead of the interests of the trust.³⁸ In the context of the state trustee, the trustee is nonetheless bound to function under the laws that govern the behavior of government agencies, even where this benefits third parties, or even the general public, in derogation of the interests of the trust.³⁹ This can include both procedural (such as public notice, public records, administrative and judicial appeal)⁴⁰ and substantive requirements (such as special requirements to consider, avoid or mitigate environmental or economic impacts associated with state lands).⁴¹

The trustee's duty of prudence descends in part from the duty of good faith, requiring that the trustee act with due care, diligence, and skill in managing the trust.⁴² This duty applies to both affirmative and negative conduct on the part of the trustee, including the timing of management decisions.⁴³ For example, in the context of a sale of real estate that is held in trust, the trustee must make the sale for the best price and on the best terms that are reasonably attainable,⁴⁴ and utilize the proper level of care, precaution, attentiveness, and judgment; investigate and evaluate alternatives; assess risks and rewards; and then make the best choice in light of this information. In the context of the management of a large trust portfolio such as the state land trust, this duty requires the trustee to function as a "prudent investor," balancing risks and returns, anticipating future needs and reevaluating and adjusting investments across the overall portfolio over time,⁴⁵ and disposing of assets in appropriate ways and at appropriate times.⁴⁶ Under the modern, evolving version of the trust doctrine, this standard should be "applied to investments not in isolation but in the context of the trust portfolio,"⁴⁷ requiring the trustee to construct a balanced portfolio of diversified investments that meet the trust's long-term management objectives. This allows the trustee to make decisions that involve greater risks, long-term investments, or lower overall returns than would be permissible in isolation,⁴⁸ so long as the investments are prudent in the context of the strategy for the overall portfolio.⁴⁹

The duty to preserve and protect the assets of the trust is closely related to the duty of prudence; in essence, it requires the trustee to manage the corpus of the trust in a manner that ensures that the trust can satisfy both the present and future needs of the trust beneficiary. In the context of a perpetual trust, this generally requires the trustee to manage the trust corpus in a manner that will ensure that the trust will remain undiminished to serve the needs of future beneficiaries in perpetuity.⁵⁰ This requires a trustee to look past simple notions of achieving "maximum financial return" on every transaction, and instead look at ways to manage trust assets in a sustainable, preservation-oriented fashion that will maintain a healthy trust corpus for future generations. As noted by a federal district court in *Branson School District RE-82 v. Romer*,⁵¹ the state "as trustee, is under no obligation to maximize the benefit of the trust to the current public schools," but should engage in long-range planning that benefits the "common schools both now and for generations to come."⁵²

As discussed further below, this broader, modern view of both the duty of prudence and the duty of preservation has important ramifications in evaluating both the potential and the approach to solar project siting on state trust lands.

Primary Mechanisms for Operating a Renewable Energy Development Program Under Arizona Statutes

A review of ASLD's authorities suggests five primary strategies for active ASLD engagement in a solar siting program:

- A. conducting a comprehensive inventory of siting opportunities on trust lands to encourage interest in trust lands;
- B. incentivizing further solar investigation of state lands via a special use permit in advance of a structured auction;
- C. actual sale of identified sites;
- D. commercial lease of identified sites; or
- E. use of a participation mechanism.

Published Inventory of Solar Opportunities

As an initial matter, interest in solar development on trust lands could be significantly enhanced through publication of an inventory of potentially available solar sites on trust lands that includes a preliminary analysis of potential constraints (such as slope, wildlife/habitat values, water, jurisdictional washes, and similar factors).

Solar opportunity data (such as that published by the National Renewable Energy Laboratory, or NREL) and land ownership data (such as that available from ASLD) is widely available. In addition, ASLD has undertaken substantial mapping efforts on its own to identify solar energy opportunities and land use constraints associated with particular state land parcels. However, we are not currently aware of a published, ASLD-approved map of sites that ASLD itself is interested in positioning for solar development. To date, solar siting proposals on trust lands have been application-driven, with particular applicants identifying potential sites and moving them through the ASLD disposal process. It is also important to note that ASLD's case for participation in renewable energy development under any of the other strategies outlined below would be significantly strengthened to the extent that ASLD had in hand a comprehensive, objective survey of "real" energy development opportunities on trust lands.

Engaging in this type of exercise would clearly be within ASLD's general authority as a trustee of the state land trust and the commissioner's powers under Arizona statute. Pursuant to A.R.S. §37-211, the commissioner is authorized to "conduct investigations and experiments on the lands of the state" to obtain "information and data which will aid in the leasing, sale and administration of lands belonging to the state." Based on these investigations, the commissioner can classify and reclassify state lands into a series of potential use categories, including commercial uses;⁵³ upon reclassification, existing leases can be noticed and cancelled to allow for a changed use.⁵⁴

Similar investigative functions are also expressly provided for under the statutes authorizing ASLD's Resource Analysis Division, which authorizes the division to

maintain a central repository for various types of land resource information, engage in remote sensing and survey work, produce maps, and engage in similar activities.⁵⁵ The division is additionally permitted to contract for any services required by the division to the extent that they cannot provide services themselves, as well as utilize the advice and services of other federal, state, local, and regional agencies.⁵⁶ Under this authority or its broader contracting authority, ASLD could work with the state universities, private consultants, or nonprofit groups to conduct this inventory as necessary.

Regardless, ASLD's existing authority under A.R.S. §37-132(A)(3), which authorizes ASLD to "make long-range plans for the future use of state lands in cooperation with other state agencies, local planning authorities and political subdivisions" would provide similar authority to engage in cooperative, state, and local planning efforts for renewable energy development. Notably, pursuant to A.R.S. 37-132(A)(11), ASLD is also authorized to expressly withdraw state lands from surface or subsurface sales or lease application "if the commissioner deems it to be in the best interest of the trust." This would allow ASLD to specifically limit the use of lands identified for solar development use through an inventory exercise under the mechanisms identified below.

Solar Site Investigation Pursuant to a Special Use Permit

Although this proposed approach would need to be explored further with local utilities to assess its actual feasibility in practice, one potential avenue for investigation of project feasibility on identified sites would be to work directly with specific utilities that are interested in promoting solar site development at a particular subset of potential solar sites pursuant to a special use permit. This approach would likely work in only a limited number of settings. However, one obvious example would be where parcels of trust lands are located next to existing, utility-controlled infrastructure, such as a substation or existing generation plant.

Pursuant to A.R.S. §37-132(B)(6), ASLD is authorized to issue permits for the "short-term use of state land for specific purposes as prescribed by rule." Under ASLD's current implementing regulations pursuant to A.A.C. R12-5-1101, these permits may be issued for "special purposes not specifically provided for by existing law or the rules and regulations of the Land Department," provided that the contemplated use does not conflict with any federal or state laws.

A special use permit can be issued for a term of up to 10 years, although an application for an initial special use permit is currently limited to a period of no longer than two years.⁵⁷ ASLD is required to charge no less than the appraised rental value of the land for the purposes provided in the permit, and a minimum of 5 cents per acre or \$10 per year.⁵⁸ ASLD can craft a form of permit appropriate for the use contemplated, and permits are subject to forfeiture if conditions are not met. ASLD can additionally require a permittee or lessee to post a bond or other collateral to guarantee performance or restoration.⁵⁹

The great flexibility afforded to ASLD under the special use permit mechanism would allow ASLD to design and draft a special-use permit instrument that would afford a solar

site investigator sufficiently extensive use of trust lands to perform detailed site investigation, such as weather analysis, wildlife surveys, and water investigations, for example, while also providing sufficient protection to ASLD by clearly specifying the intended use of the lands.

Perhaps more importantly, ASLD can issue a special use permit without competitive bidding or public auction, which would allow ASLD to work closely with a utility or other potential solar investigator to evaluate several different sites in a non-competitive setting. This would allow for a site investigation to occur to verify the viability of a solar site prior to any auction process, substantially lowering the risk to potential bidders on the sites. This would also allow ASLD to work directly with a local utility that is interested in entering into a Power Purchase Agreement (PPA) with an as-yet-to-be-identified generator at those sites.

Once site investigations are complete, ASLD could bring the sites to market via a structured public auction process, while the utility simultaneously solicits bids on a PPA. For example, in one potential scenario, the initial bidders from the first round of a site auction process would qualify to be evaluated by the utility as candidates for the PPA; the selected “short list” of candidates in the PPA (at least two) would then proceed to a final round of state land auction, where the bidders would bid on the land value with the attached PPA. The utility would then recover the costs of its site investigation through the terms of the PPA with the successful party.

This approach would not be appropriate in all or even most circumstances, by any means. In many cases (such as development of large-scale projects) it would likely be of greater advantage to the utility to hold an open PPA process that would consider bids from a variety of different potential sites and parties from around the state. However, in certain circumstances – such as where a utility is seeking to develop renewable capacity in connection with existing generation and transmission infrastructure – this process could (at least in theory) benefit both parties by allowing utilities to access trust lands adjacent to existing infrastructure, while allowing ASLD to both prequalify bidders (ensuring commercial success of a long-term lessee via an existing PPA) and potentially “bidding up” the ultimate price of lands for lease or sale by raising the stakes in the final round such that the successful bidder obtains rights to both the site and the PPA.

Sale of Pre-Identified Lands for Solar Development

ASLD has broad authority to sell trust lands upon application or on its own initiative.⁶⁰ With the exception of urban lands (which are subject to additional requirements under the Urban Lands Act⁶¹), timber lands (which require timber values to be sold separately from the land⁶²), and mineral lands (which are restricted from sale⁶³), essentially all state lands are open to sale,⁶⁴ although there are acreage limitations on the amount of lands classified for grazing (640 acres) and agricultural purposes (160 acres) that can be sold to any one person.⁶⁵ This broad authority would allow ASLD to selectively market lands pre-identified as suitable for solar use through an inventory process, either by marketing high-opportunity lands on its own initiative or by inviting applications for sale on the pre-identified inventory.

Once lands have been identified for sale by ASLD (or an application for their sale has been approved), they are appraised.⁶⁶ If ASLD determines that the sale is in the best interests of the trust, after appropriate public notice ASLD can order the sale of lands “to the highest and best bidder therefore at public auction held at the county seat.”⁶⁷

Pursuant to A.R.S. §37-132(A)(5), ASLD is permitted to impose “such conditions and covenants and make such reservations in the sale of state lands as the commissioner deems to be in the best interest of the state trust.” ASLD may impose terms of sale that are in the best interest of the trust, although discouraging certain bidders, provided that it does not unreasonably limit the pool of potential bidders.⁶⁸ ASLD can additionally require a permittee, lessee, or grantee to post a surety bond or other collateral to guarantee performance.⁶⁹ Pursuant to A.R.S. §37-261, ASLD is also allowed to auction its reversionary rights in a trust parcel held for more than 10 years.

A purchaser of state lands at auction is required to pay a minimum of 10 percent of the appraised value of the lands at the time the land is sold;⁷⁰ if the land is sold for more than the appraised value, the difference between 10 percent of the appraised value and 10 percent of the sale price must be paid within 30 days.⁷¹ The remainder of the purchase price may be financed through ASLD on terms of up to 25 years, at either a fixed or variable interest rate determined by the State Treasurer.⁷²

Upon the sale of the lands at auction for less than their full cash value, the purchaser receives a certificate of purchase that establishes the terms for payment of the remaining purchase price.⁷³ The certificate of purchase essentially functions as a deed to the property, subject to discretionary forfeiture and reversion of the land to ASLD if the terms of the certificate are not met, and can be recorded and assigned.⁷⁴ In addition, to the extent that a holder of a certificate of purchase sells any “sand, gravel, stone or other natural product” from the land subject to the certificate, the money derived from the sale is paid to ASLD and applied against remaining interest and principal.⁷⁵

The holder of a certificate of purchase is entitled to pay off the remaining debt on the property at any time; upon full payment, ASLD issues a final patent for the land.⁷⁶ ASLD may also issue a patent for less than the entire property where it finds that doing so would be in the best interest of the trust, that the remaining value of the property is greater than the amount owed under the certificate of purchase, and that the value already paid for the acreage subject to the partial patent exceeds the per-acre purchase price for the entire property.⁷⁷ However, a partial patent cannot be issued for less than 10 acres or less than one-quarter of the total land (whichever is smaller), although if the original land tract is less than 40 acres in size, partial patents may be issued for as little as five acres.⁷⁸

Given ASLD’s ability to bring a large number of sites to market (and thus accept a higher risk that any particular site will succeed as compared to private landowners), these unique financing and guaranty provisions would potentially allow for a carefully structured sale of trust lands that could be attractive to a solar developer. For example, an entity seeking to develop a solar project on state lands could conceivably acquire these lands at auction for a 10-percent down payment with favorable interest rates that might be difficult to match in the private finance market (particularly under current financial market

conditions). This would allow a developer to obtain a COP sufficient to guarantee title to the lands following successful permitting of a solar project, with a reversion mechanism to ASLD without further liability to the developer in the event that the project was unsuccessful (since the forfeiture would be to ASLD rather than to an independent financier).

Solar Development Pursuant to a Commercial Lease

A second general approach to a solar development effort would be to attempt to market solar lands pursuant to a commercial lease. Commercial leases⁷⁹ in Arizona are generally issued for terms of between 10 and 99 years, and are sold at public auction to the “highest and best bidder.”

Lease rates are generally required to be the fair market rental value of the land, subject to annual (or for long-term leases, periodic) adjustment. Pursuant to A.R.S. §37-132(A)(7) and 37-214(B), commercial leases are subject to the approval of the board of appeals. If lands are leased for more than 10 years, the board must determine that the benefit to the trust would be greater than if the lands were sold.⁸⁰ The “commercial” designation is essentially a catch-all category that includes “business, institutional, religious, charitable, governmental or recreational purposes, or any general purpose other than agricultural, grazing, mining, oil, homesite or rights-of-way.”⁸¹

Under A.R.S. § 37-281.02, state trust lands can be leased for commercial purposes to the highest and best bidder at public auction if ASLD determines that leasing of the land is in the best interest of the state.⁸² The lease granted under this authority must be for more than 10 years but no more than 99 years, and it must provide for an annual rental of not less than the appraised fair market rental value of the land.⁸³

ASLD’s regulations provide that all state lands classified as suitable for commercial purposes are subject to a commercial lease.⁸⁴ Applications to lease lands not classified as commercial must be accompanied by a petition for reclassification.⁸⁵ Unless it is in the best interest of the state, it is not the policy of ASLD to issue commercial leases which will seriously interfere with, damage, or break up operations of an established ranch or farm unit.⁸⁶ There is no limit to the amount of commercial land that may be leased to any one individual or association.⁸⁷

The lease auction must be conducted in the same manner as required for sales of state trust lands, with some adjustment.⁸⁸ For certain rural lands that are a given distance from incorporated cities and towns, ASLD must cooperate with the county in which the land is located in considering the intended uses of the land.⁸⁹ The lease must include a rental adjustment formula under which the rental is subject to adjustment every five years or more frequently, and both the rental for the first five-year period and the rental adjustment formula must be established by ASLD prior to auction and published in the call for bids.⁹⁰ In addition, the annual rental must not be less than the appraised fair market rental value of the land. *Id.* The lease *may* include an amortization schedule to determine the value of improvements when the lease is terminated.⁹¹ Each offer for lease

must reserve the right of ASLD to reject all bids and re-offer the land for lease if the bids are not acceptable to ASLD.⁹²

In most cases an application to lease state trust lands must be accompanied by a deposit based on the approximate first-year rental plus administrative expenses, which deposit is (i) returned if the applicant is not the successful bidder, (ii) applied to the rental price if the applicant is the successful bidder, or (iii) transferred to the trust if there are no bidders at auction.⁹³ Before acceptance of a bid, ASLD is required to establish to its satisfaction the responsibility of a bidder.⁹⁴ Upon announcement of the successful bidder, the first year's annual rental must be paid by cashier's check; if the successful bid exceeds the minimum bid, the difference is due five business days after the auction. Failure to meet these deadlines results in forfeiture of the lease and money already paid. The successful bidder must also pay the cost of the publication and reasonable expenses of the sale.⁹⁵

Participation Agreement

The final mechanism available to ASLD in pursuing solar development opportunities would be the use of a participation contract. A participation contract involves a transaction in which lands are auctioned at a lesser current price in exchange for a "participation" in the revenues generated when the lands are subsequently sold or leased by the purchaser.

Pursuant to A.R.S. §37-239, ASLD is authorized to enter into participation contracts on state lands, and to retain consultants in negotiating or preparing these contracts based on a fee charged to the applicant for a participation contract. Like land sales and commercial leases, participation contracts are subject to the approval of the board of appeals.⁹⁶ Prior to the approval of a participation contract, ASLD is required to consider and report on anticipated revenues from the contract, trends in land values for similar land uses, the financial feasibility, the economic risks and benefits to the trust, and alternative uses for the land.⁹⁷

Although the participation contract statute is primarily directed at development projects, nothing in the statute would appear to prohibit the use of this mechanism for a solar development purpose. Pursuant to A.R.S. §37-101, a "participation contract" is defined as "a contract arising out of a sale together with other rights and obligations in trust lands whereby ASLD receives a share of the revenues generated by subsequent sales or leases."

State land participation contracts are required to provide specific criteria and plans for phasing and disposition of subsequent sales or leases of the participation lands, a formula for determining the amount of revenue to the trust as a result of subsequent sales and leases, and specific rights and remedies in the case of a default on the participation contract, including forfeiture of the lands.⁹⁸

Using this mechanism, ASLD could develop a participation contract for development of a solar project on one or more parcels of pre-identified lands. Using the available land sale or lease mechanisms discussed earlier, these lands would be auctioned to a "master" solar developer subject to the participation contract, which could then fund an investigation of

the feasibility of multiple sites, while providing for ASLD to receive a percentage of the subsequent revenues generated by the sale or lease of lands for solar use (or for the developer's own use).

This would likely allow ASLD to obtain higher value for its lands than a raw sale over the long term, albeit at somewhat higher risk, and with significantly more investment of staff time and resources to develop the participation contract. However, this mechanism could be potentially attractive to solar developers with an interest in investigating several different potential sites (such as a developer positioning itself for participation in multiple potential PPA negotiations); this mechanism could allow the developer to invest time and resources in the investigation of those sites, use one or more of the sites for its own development, and/or sell the remaining sites to other developers.

It should be noted that via its commercial leasing authority, ASLD can additionally include similar types of participation terms in commercial leases; the inclusion of such terms in a commercial lease does not subject the lease to approval as a participation agreement.

Use of a “Reversionary Structure” to Incentivize Solar Development

Perhaps the single greatest advantage that ASLD-managed lands may enjoy over similarly situated private lands is related to the current stalemate (described elsewhere above) that exists between private landowners that have only limited solar site opportunities that they want to market, and solar developers who want low-risk access to those sites during their initial investigations of project feasibility. As noted above, this creates a situation in which private landowners are reluctant to grant mere options on potential sites to developers for fear that they will tie up their lands, fail to close, and thus miss an opportunity. Instead, private owners prefer to tie up lands conclusively through an up-front lease or sale. Similarly, solar developers are reluctant to make long-term commitments to a particular site in the absence of certainty that a particular site or planned project is feasible.

However, a review of the solar opportunities map suggests that ASLD likely controls a very large number of potentially suitable sites – certainly more sites than ASLD could conceivably expect to see developed, even assuming its lands were to host a disproportionate share, or all, of the future solar development in Arizona. As such, even as ASLD is likely to be less constrained in the development of its lands than is BLM, ASLD also does not suffer from the same opportunity costs that apply to private landowners with limited numbers of potential sites to market. Since if one site fails, there are still dozens of other potential ASLD sites that could succeed. Moreover, given the sheer size of ASLD's holdings, the fact that a particular site is tied up for some period of time for solar investigation does not compromise ASLD's ability to market its lands for alternative high-value uses, such as development, since ASLD controls far more land that is suitable for development than could be reasonably brought to market within 50, 100, or even 500 years.

This advantage suggests that ASLD might be best advised to pursue a “shotgun” approach to solar site development. Effectively, this is a marketing mechanism that would generate revenue for the trust via the “option” of a large number of sites to solar developers seeking low-risk opportunities for site investigation and feasibility studies, while counting on the ultimate success of only a small number of those potential sites.

Legality of Preconditions on the Use of State Lands

The commissioner has broad statutory authority to impose conditions and covenants and make such reservations in the sale of state lands as the commissioner deems to be in the interest of the state trust.⁹⁹ Under this authority, the commissioner could potentially structure a sale or lease of state trust lands so that successful development of a renewable energy facility is in fact a condition of the sale or lease.

There is relatively little case law evaluating the propriety of specific terms of sale or lease in this regard; however, as a general matter, the discretion of the commissioner in structuring and planning the sale, lease, and use of state land is closely related to the three key requirements of the Enabling Act: (1) that trust lands and the natural products of trust lands may only be sold or leased “to the highest and best bidder at a public action,” that (2) all lands and leases must be appraised at their “true value,” and (3) that they cannot be disposed for less than this appraised true value.¹⁰⁰ As noted elsewhere above, these provisions are replicated in Arizona’s Constitution as well, along with additional restrictions.¹⁰¹ These requirements have imposed particularly significant restrictions on Arizona trust land dispositions due to the strict interpretation of them adopted in *Lassen v. Arizona ex rel. Ariz. Highway Dep’t.*¹⁰²

The infamous *Lassen* case invalidated Arizona’s long-standing practice of granting rights-of-way to the State Highway Department free of charge (despite the Enabling Act requirement that lands could only be sold or leased at public auction, to the highest and best bidder, for not less than their true value),¹⁰³ which had been justified by the theory that highways built on trust lands would always enhance the value of the surrounding trust lands.¹⁰⁴ In *Lassen*, the U.S. Supreme Court found that these activities impermissibly resulted in the disposition of lands for less than their true value.¹⁰⁵ Because a discount for “enhanced value” would require the state to make an inherently uncertain estimate of the value of the enhancement, the court found that this would risk diverting a portion of the benefits derived from the trust lands to the Highway Department and away from trust beneficiaries.¹⁰⁶

The rationale provided in *Lassen* has resulted in a series of cases that have overturned numerous strategies employed by ASLD or the legislature to circumvent competitive bidding. In various cases courts have found that trust lands cannot be acquired by condemnation because the trust would not benefit from any additional profit that might come from competitive bidding at advertised public auction,¹⁰⁷ that public auctions and competitive bidding are required for all sales of land, even when the purchaser is a governmental entity such as a city¹⁰⁸ or a state agency,¹⁰⁹ that lease provisions cannot provide for future decreases in rental rates if real estate conditions render the lease “uneconomic,”¹¹⁰ that land exchanges are unconstitutional insofar as they constitute

“sales” without public auction,¹¹¹ that ASLD cannot reject competitive bids by conservation organizations for grazing leases¹¹² or be required to automatically renew leases,¹¹³ and that leases or sales of mineral resources cannot be disposed for less than their true value as determined by appraisal¹¹⁴ and the maximum value of these resources cannot be established by statute.¹¹⁵

However, insofar as competitive bidding can be maintained as part of the disposal process, the courts have found that ASLD has “great discretion” in deciding which lands are to be disposed, structuring the actual terms under which land is sold or leased, and establishing the conditions under which competitive bidding occurs. As a general rule, ASLD’s determinations under its “authority to devise detailed plans for the sale, lease, and use of state trust land ... will not be overturned absent illegal action, an abuse of discretion, or unfair bidding.”¹¹⁶ The courts have found that “[a]s long as the proposed sale terms are justified by the best interest of the state trust, do not include conditions that would exclude eligible bidders, are not intended to favor a particular bidder, and are not otherwise contrary to law, the commissioner has discretionary authority to determine the structure of a proposed sale.”¹¹⁷ This standard effectively allows ASLD to structure a sale or lease of state lands however it deems fit, even if this substantially limits the pool of interested bidders – so long as the terms do not “improperly limit the universe of potential bidders to one.”¹¹⁸

In *Campana v. Arizona State Land Department*, the court found:

[T]he Commissioner is obligated to manage trust lands for the benefit of the trust and its beneficiaries. He has the duty to maximize revenue to the trust. However, immediate revenue is not the sole consideration in determining the best interests of the trust. The Commissioner has great discretion concerning the disposition of trust lands and has authority to devise detailed plans for the sale, lease, and use of state land. These decisions will not be overturned absent illegal action, an abuse of discretion, or an unfair bidding.¹¹⁹

In *Campana*, the court upheld the legality of an auction structure where two related auctions were scheduled in relation to a planned community, one for three commercial leases for a set of parcels and another for the sale of nearby residential land and 58 acres of associated public roadway and utilities. The department structured the auction so that the successful bidder for the leases would become the master developer of the entire community, and required the successful bidder for the sale to post a bond for the installation of infrastructure.¹²⁰ The auctions were protested on the grounds that the bidding was chilled by the relationship of the commercial leases to the land sale, which purportedly resulted in a preference to the lessee as master developer over a residential developer.¹²¹ The court found that there was no evidence in the record that the bidding was chilled, citing the broad discretion of the commissioner in planning for the disposition of land as quoted above.¹²²

In *Koepnick v. Arizona State Land Department*, the court rejected a challenge to a reclassification of leased land from agricultural to commercial (thus terminating the lease

of the agricultural lessee), despite the absence of an immediate commercial lessee.¹²³ In upholding the commissioner's action, the court emphasized the commissioner's discretion in planning for the disposition of state trust land and noted that the commissioner's determination of the trust's "best interest" is made in light of all of the circumstances.¹²⁴ It observed that the commissioner "may legitimately consider alternate future uses of state land. Thus, the commissioner will not abuse his or her discretion if he or she decides to forego immediate revenue to obtain public benefits flowing from employing state land in uses of higher value."¹²⁵

It should be noted, however, that although the commissioner's discretion is broad, conditions placed on the disposition of state trust lands have been invalidated by the courts for violating a lessee's rights and for failure to consider the best interest of the trust. In *Havasu Heights v. State Land Department of Arizona*, the court invalidated two "special conditions" imposed in commercial holding leases because they waived rights granted lessees by the Arizona Constitution and statutes.¹²⁶ One such condition waived claims to damages otherwise granted by statute, and the other waived the lessee's rights to compensation for improvements at the end of the lease term.¹²⁷ The court noted that although the department has a great deal of discretion concerning the terms of the lease, the department may not act contrary to the statutory or constitutional scheme.¹²⁸

In *Forest Guardians v. Wells*, the Department did not expressly impose a condition on a sale or lease, but it denied awarding a grazing lease to an environmental group as a matter of law because the environmental group did not intend to actually use the land for grazing.¹²⁹ This denial could be thought of as imposing something of a de facto condition on the lease. The Supreme Court held that the commissioner's fiduciary duty required him to at least *consider* whether the rejected bids would have been best for the corpus of the trust and its beneficiaries, noting that although the constitution permitted property classification as an aid to proper administration of the trust, "administrative concern and practice must conform to the core fiduciary trust duties imposed by our law."¹³⁰

As such, assuming compliance with the statutory structure described above (including statutory provisions regarding prices to be obtained), whether a sale of state trust land could be structured to require development of a solar energy facility as a condition of sale would likely turn on whether such a condition was found to be in the best interest of the trust and consistent with ASLD's other constitutional and fiduciary responsibilities.

Consistency of an "Option"-Based Renewable Energy Development Program with the Trust Responsibility

The standards under which ASLD's interpretation of its trust responsibility will ultimately be influenced by the judicial doctrines governing deference to state agencies is their interpretation of federal laws, state constitutional provisions, state statutes, and in their findings of fact. Assuming that a person who is seeking to challenge a given decision of ASLD can meet the requirements for standing (that they have suffered an "injury-in-fact,"¹³¹ causality, judicial redressability,¹³² and that they are within the category of persons intended to be protected by a given constitutional or statutory

requirement),¹³³ the standard applicable will depend on whether the decision at issue involves an interpretation of law or a finding of fact.

Where ASLD's decision involves an interpretation of law – such as whether or not a given action is authorized by a state statute – it will generally be subject to de novo review – the least deferential standard of review.¹³⁴ By contrast, where ASLD's decision involves a conclusion of fact – such as whether or not a given action is consistent with the interests of the trust – ASLD is entitled to significant levels of deference.¹³⁵ As a state agency, as long as the agency complies with the letter of the law, the agency's actual decisions are normally entitled to significant deference and can only be overturned if the decisions are “arbitrary” or “capricious,” or are unsupported by substantial evidence in the record.¹³⁶ Similarly, where a discretionary decision of an agency is implicated (such as a decision with regard to whether or not to grant a lease, whether or not to sell land, and so forth) courts will apply a similar “abuse of discretion” standard¹³⁷ – upholding the decision unless the agency has disregarded evidence, committed clear error, or acted against reason.¹³⁸

To the extent that ASLD's participation in a solar development program is premised on conclusions of fact – i.e., determinations that particular lands are suitable for such use or that participation would be a reasonable investment as part of the management of the larger trust portfolio and otherwise in the best interests of the trust – this standard would clearly be met. ASLD would have a strong factual case that making a series of favorable sites available for solar development would neither place the trust at substantial risk nor involve forgoing other opportunities that would potentially have produced more favorable returns:

- Arizona has approximately 9.28 million surface acres of trust lands.¹³⁹ Of these, more than one million acres are located adjacent to or within rapidly urbanizing areas where development may be the most valuable future use. In addition, many of Arizona trust lands are held in large, contiguous parcels, some approaching hundreds of square miles in size.
- In recent years, over 90 percent of the annual revenue generated from the trust portfolio has been generated by land sales and commercial uses of trust lands, primarily for commercial and residential development in Arizona's urban areas.
- These uses currently occur on an extremely small subset of lands; ASLD has recently averaged sales of only around 2,000 to 3,000 acres of land for development each year out of the nearly one million acres currently located within or adjacent to urban areas.
- ASLD's land portfolio includes a large quantity of solar-suitable lands, the majority of which are currently used for agricultural purposes or grazing, and which produce comparatively low returns. In fact, ASLD has recently generated less than 1 percent of its annual revenues from grazing and agricultural leases, the use to which the vast majority of trust lands (more than 8.5 million acres) are currently dedicated.

- Although some solar-suitable lands may also have future development values, at recent rates of land disposal, development of solar projects for temporary and in many cases, permanent disposals are unlikely to interfere with development opportunities. Despite the high value of land for development, given the rate of land absorption in Arizona’s urban areas, constraints on transportation, water, and other natural resources, and various political considerations, it is highly unlikely that ASLD will ever sell more than a small percentage of its overall portfolio for development use over the next few hundred years. In fact, solar development may be a useful “holding” use for development-suitable lands in urban areas, allowing lands to generate revenues in the interim, while ultimately being developed for urban uses after solar leases expire.
- Unlike many private parties, ASLD’s land base is held essentially without carrying costs (since ASLD already owns the land free and clear and has no tax liability for them); compared to private parties who must finance and hold lands for development use, ASLD is in a nearly ideal position to hold and maintain a series of potential solar sites.

Assuming that a solar development program could be shown to produce a revenue stream higher than current agricultural or grazing uses of the participating lands, participation in renewable energy development would thus clearly be consistent with the economic and non-economic interests of the trust and easily defensible under an “arbitrary and capricious” standard of review. As such, insofar as the requirement that the trust obtain “true value” and that resources be disposed competitively can be maintained, the broad discretion afforded to ASLD in structuring the terms of a sale or lease of trust lands and selecting lands for disposal would clearly allow for a renewable energy development program.

Structuring an “Option” Program via Commercial Lease

An option-like mechanism for the sale or lease of trust lands for renewable energy development purposes could be readily developed under existing ASLD authorities for commercial lease, which would allow ASLD to set the term of lease to any viable length, and can allow for lease cancellation or early termination. As such, assuming that a lease was constructed with a deliberate termination in the event that a detailed site investigation (or project development period) demonstrated that the lessee would be unable to develop the site, obtain a Power Purchase Agreement, obtain financing, or meet other identified conditions and milestones, the site could simply revert to ASLD in the event of project failure. This would effectively allow a potential solar developer to pay to lease the site on a short-term basis, with an “option” to continue the lease for longer.

Previous caselaw evaluating the legality of “holding leases” suggests that this type of structure should be permissible. In *Havasu Heights Ranch and Development Corporation v. State Land Department of Arizona*, the court was asked to evaluate the validity of “holding leases” issued by the Department to Havasu Heights.¹⁴⁰ The leases, labeled “commercial,” were issued “for the purpose of holding for future commercial uses as may be approved by lessor” and prohibited any actual current use of the land.¹⁴¹

The Department was in the practice of issuing such leases essentially for speculative purposes based on the value of the preferred right of renewal granted by statute in the instance that the lands were subsequently reclassified for urban land development. *Id.* at 41. The leases were challenged on a number of grounds, including that “holding for speculation” is not a valid commercial “use” within the version of A.R.S. § 37-101 that was then applicable.

The court denied this challenge, finding that “use” can mean “purpose,” which is an “end, objective, plan or project” and does not require “actual use.”¹⁴² Further, the definition of “commercial” land included (and still includes under the present statute) “business” purposes and “any general purpose other than agricultural, grazing, mining, oil, homesite or rights-of-way.”¹⁴³ The court found that holding for potential future profit could fit into either of these categories.¹⁴⁴ The court observed that its statutory interpretation was supported by the requirements that the department make the “best use” of trust land and to maximize the financial benefits flowing from the trust. Keeping options open, the court observed, may in some circumstances be the “best use” of trust land and consistent with the duty to maximize the value of the trust.¹⁴⁵

This precedent suggests that an option-like lease arrangement, where state trust land is deliberately leased in advance of feasibility investigation and permitting (and subsequently cancelled in the event of project failure), would be fully consistent with a lease for “commercial use,” and, in the right circumstances, ASLD’s trust responsibilities. Combined with an appropriate assessment of the value of lease improvements, this could provide a reasonably cost-effective method (from a developer’s point of view) for providing an “option” on a longer-term lease; in addition, by including provisions which required the developer to turn over the results of any studies or site investigations as a condition of an early lease termination, this could potentially leave ASLD in a better position to dispose of a particular site even if the initial site developer’s project were to fail.

Structuring an “Option” via Reversion of Certificate of Purchase

Statutory provisions that dictate the payment structure for the sale of trust land are less flexible; however, the provisions for default on a sale of state lands would nonetheless make a type of “option”-like arrangement possible under either a direct sale or a participation agreement.

When trust land is sold at auction, a portion of the purchase price (10-25% of the appraised value) and fees must be paid immediately. If the successful bid exceeds the appraised value, further payment is due within 30 days.¹⁴⁶ The commissioner is required to establish prior to the notice of sale whether the remaining balance is due and payable within 30 days of the auction or if the balance will be paid over a longer term, which shall not exceed 25 years.¹⁴⁷

Upon payment of the amounts due immediately and within the first 30 days of the auction, a purchaser is entitled to receive a certificate of purchase.¹⁴⁸ The certificate of purchase must include, among other items, the date when each deferred payment will be

due, the amount of each deferred payment, and the rate of interest on the first deferred payment. The purchaser must agree to pay taxes, water assessments, and other charges assessed against the land, that the purchaser will not “permit any loss or commit any waste to or upon the lands,” that water rights will be maintained, and to abide by the terms of other agreements and covenants.¹⁴⁹

A certificate of purchase entitles the purchaser to possession of the lands as long as the certificate is in force, and until a patent is granted.¹⁵⁰ Once the purchaser has discharged the entire debt – which may be discharged early – and demonstrates that the terms and conditions of the certificate of purchase have been satisfied, ASLD issues the purchaser a patent for the land.¹⁵¹

After a purchaser has successfully bid on a tract of trust land and received a certificate of purchase, but before the entire purchase amount is paid and a patent issued, the certificate of purchase and the land may be forfeit by the purchaser. If a purchaser defaults in a payment of principal or interest (as provided in the certificate of purchase) or fails to comply with a condition, covenant, or requirement of the certificate of purchase, the certificate will be declared subject to forfeiture. Within 60 days after default or failure, ASLD will provide notice of the same.¹⁵² If payment is not made or the failure is not corrected within 60 days, the certificate of purchase and all rights of the purchaser to the land and improvements may be canceled. If no appeal is made to the formal order cancelling the certificate of purchase, the cancellation becomes final, and improvements and payments already made are deemed rental for the land.¹⁵³

The commissioner has broad authority to impose conditions and covenants and make such reservations in the sale of state lands as the commissioner deems to be in the interest of the state trust.¹⁵⁴ Under this authority, the commissioner could potentially structure a sale of state trust lands so that successful development of a renewable energy facility, within a specific period of time, is a condition of the purchase.

As such, if a purchaser subject to reversion was to fail to develop a facility on a particular site following an investigation of project feasibility, a reversion could be structured such that the sale of the site could be cancelled without further penalty pursuant to the provisions described above, subject to forfeiture of the 10% minimum down payment and intervening payments and interest. Assuming a land value appraisal was not unreasonable in light of the risks of forfeiture, a forfeiture of this amount of the ultimate purchase price may well be a reasonable price to pay as a temporary “rental” or a *de facto* option on the land – particularly if the deal were structured around a participation interest.

Appraised Value Adjustments During the Term of “Option”

One additional tool which could be of significance in structuring a competitive “option”-type structure for initial solar investigation on a commercial lease (and possible for a participation) would be to provide for a lower rental (or land value) to be assessed during the initial investigation period in recognition of the substantial expenditures to be undertaken during the initial investigation, and/or for an increase in rental upon

achievement of an identified milestone (such as the grant of a construction permit or the actual construction of a facility).

With regard to the former approach, as noted elsewhere above, both commercial rental rates and land sales for trust lands must be based on a fair market value appraisal. However, this appraisal can (and should) take into consideration obligations placed on the lessee or purchaser by ASLD in the terms of a lease or participation agreement to undertake improvements and costs.

For example, in *Northeast Phoenix Holdings, LLC v. Winkleman*, the Arizona court of appeals found that it was constitutional for the commissioner to bundle a commercial lease of a parcel of land together with associated rights of way for purposes of appraisal and auction. The successful bidder at the auction was required to make a substantial investment in infrastructure improvements to the parcel and rights of way, and to account for those costs ASLD assigned a total value to the combined property interests that expressly considered the costs of infrastructure improvements on the associated rights-of-way and thus provided a “discount” to the lessee that obtained the rights of way based on the costs of those improvements.¹⁵⁵ The court upheld this method of appraisal.

Although this holding relied at least in part on the commissioner’s statutory authority to assess the value of rights-of-ways or parcels to be used for public purposes and assign those values to particular parcels within the scope of an approved development or secondary plan for urban land--and land sold or leased for solar development would not necessarily be urban land--the court specifically found that it was not a violation of the Arizona constitution, Enabling Act, or the trust responsibility to approach the appraisal and disposition of property in this manner, confirming the discretion of the commissioner in structuring auctions in the best interests of the trust.¹⁵⁶

With regard to a later increase in rental rate (for example, upon permitting success) the primary restriction that is likely to be applied is that the financial terms of the lease are sufficiently clear at the time of auction to ensure that (a) the terms do not have a chilling effect on the auction price, and (b) that the interests of the trust are not being derogated for the benefit of a third party (i.e., that the lease is consistent with the duty of loyalty). In *Campana v. Arizona State Land Department*, plaintiff Campana successfully challenged the rental adjustment formula included in the 99-year commercial lease of 563 acres of trust land in Northeast Phoenix (a portion of the Desert Ridge development).¹⁵⁷ The rental adjustment clause was intended to ensure that the lessee would always be able to pay its rent, so as not to default if land values declined. It provided as follows:

Lessor and Lessee may agree, with the approval of the Board [of Appeals], to amend the rent provisions in Article 5 to reduce rent due and/or modify the method of adjusting the rent if at any time after the first three...Lease Years, Lessor and Lessee mutually agree that the real estate market affecting the Parcel had deteriorated since the execution of this Lease rendering the Lease uneconomic.¹⁵⁸

The court held that under A.R.S. § 37-281.02, the rental adjustment formula must be specified in the lease prior to the bidding process, so that at the time of the auction, the lease price is a known and definite figure. Because this rental adjustment formula did not set a fixed formula, and instead allowed for unstructured future negotiations, it violated A.R.S. § 37-281.02, which requires that the department sell or lease lands to the highest bidder. The court found that “the ‘highest’ bidder cannot truly be determined if the rent could be arbitrarily reduced at a later date through further negotiations. Under such a lease, the true value of the land also becomes dependent on nebulous factors such as the negotiating skills of the lessees and the degree of receptivity of the Land Department.”¹⁵⁹

Although this case would preclude a rental adjustment formula that left future rents open to future negotiations, it arguably would not preclude a rental adjustment formula that provided, for example, for a pre-determined increase in the rent upon satisfaction of a condition such as approval of a Certificate of Environmental Compatibility (CEC) for solar energy development. This potential flexibility in the rental adjustment provision of the statute, however, does not resolve the issue of how such flexibility could be reconciled with the requirement that state land be leased for its appraised value.

The Current ASLD Solar Program

Discussions with ASLD staff have revealed that ASLD is in the process of creating a template for a solar development commercial lease. Unfortunately, because this lease template is under development with a private party, it is subject to confidentiality requirements and is therefore unavailable for review.

In general terms, ASLD appears to be considering a 30-year commercial lease, which can be extended to 50 years via two 10-year extension periods. The lease would be based on a 20-year amortization schedule for a power plant with an expected operating life of 40 years, and provide for the use of state lands for solar power development or hybrid development. The lease would additionally provide for – but not guarantee – access to groundwater subject to a separate agreement, and the grant of rights-of-way across trust lands as necessary to facilitate a transmission interconnection. It would also provide for project removal and site remediation upon completion of the lease.

In essence, the ASLD template would provide for a two- to three- year “development period” at the beginning of the lease, which would terminate upon the date that the project begins producing power. During this period the lessee would pay a reduced rent, based on a percentage of appraised land value (as established by the winning bid at auction). During the development period, the lessee is also entitled to cancel the lease in the event that the lessee is unable to complete entitlements by identified target dates (such as obtaining a CEC, executing a Power Purchase Agreement, receiving transmission interconnection approval, etc.). Upon completion of the development period, the lease rent would escalate to a higher percentage of the appraised land value (established at auction) and/or a participation/royalty on power produced by the project.

As discussed above, all of the concepts addressed in the draft lease terms appear to be fully consistent with ASLD’s statutory authorities. The approach under consideration by

ASLD appears to fall well within the range of potential opportunities and mechanisms identified in our analysis.

Immediate Opportunities for Moving Forward on a Solar Development Program

Based on our review of ASLD’s legal authorities, the pursuit of a solar development program appears both feasible and desirable. Given the substantial constraints on the development of federal lands and the complications associated with the development of solar projects on private lands, Arizona’s state trust lands appear to be well-positioned to take advantage of solar development opportunities.

As noted earlier, the most substantial constraints on the use of trust lands for solar development as compared to private lands are likely to be those associated with the public auction requirements that apply to the sale or lease of trust lands. However, as discussed above, ASLD’s ability to potentially position a large number of sites and take advantage of its low carrying and opportunity costs to structure “option”-type arrangements for commercial leases, sales, or participation agreements would appear to substantially offset this disadvantage. Given the critical role that the auction requirements play in protecting the interests of the trust, we do not see a compelling need to change ASLD’s current authorities in this regard – particularly in the relatively dangerous context of a politically charged solar boom.

Given this fact, and based on initial conversations with ASLD staff, we would suggest three potential avenues for further investigation that would seem to offer the greatest promise for supporting or promoting solar development on state trust lands (both in Arizona and elsewhere):

(A) Informing the development of leasing programs via analysis of alternative lease forms that improve trust revenue outcomes while supporting solar development, with emphasis on royalty/participation structures and exit strategies/indemnity provisions.

ASLD staff have noted that at present, there are not a large number of example leases available for review by ASLD and its attorneys. Although other state land departments have drafted exploratory leases for renewable energy projects, ASLD does not currently have access to successful examples of royalty arrangements and similar participation structures. In addition, given the strong likelihood that leased lands will return to ASLD for alternative uses in the future, examples of appropriate land recovery/restoration provisions were specifically identified by ASLD as an important area for further investigation.

(B) Analysis of whether (and at what point) an ASLD solar development program would ultimately require a rulemaking.

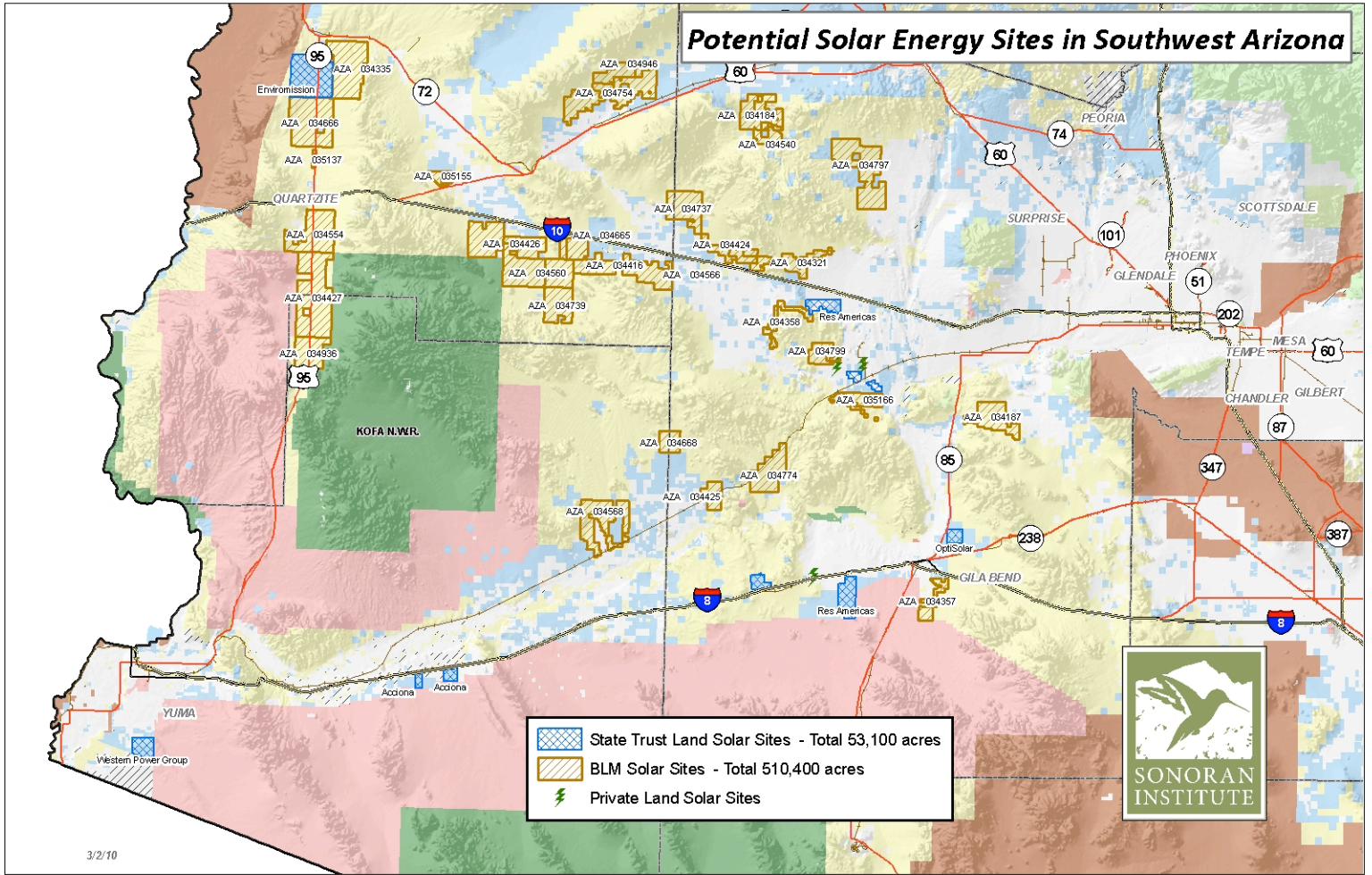
As noted in our discussion of the *Havasu Heights* case in Section V(C), the courts have ruled that a previous special-purpose ASLD lease program (the commercial “holding lease” program) required a rulemaking process. A full discussion of the legal principles governing when an agency rulemaking is and is not required falls beyond the scope of

this investigation and analysis. However, assuming ASLD grants more than just a few special-purpose solar leases that it is developing on a case-by-case basis, ASLD will likely need to be prepared to either conduct a rulemaking process or to defend its program against a potential challenge on this basis.

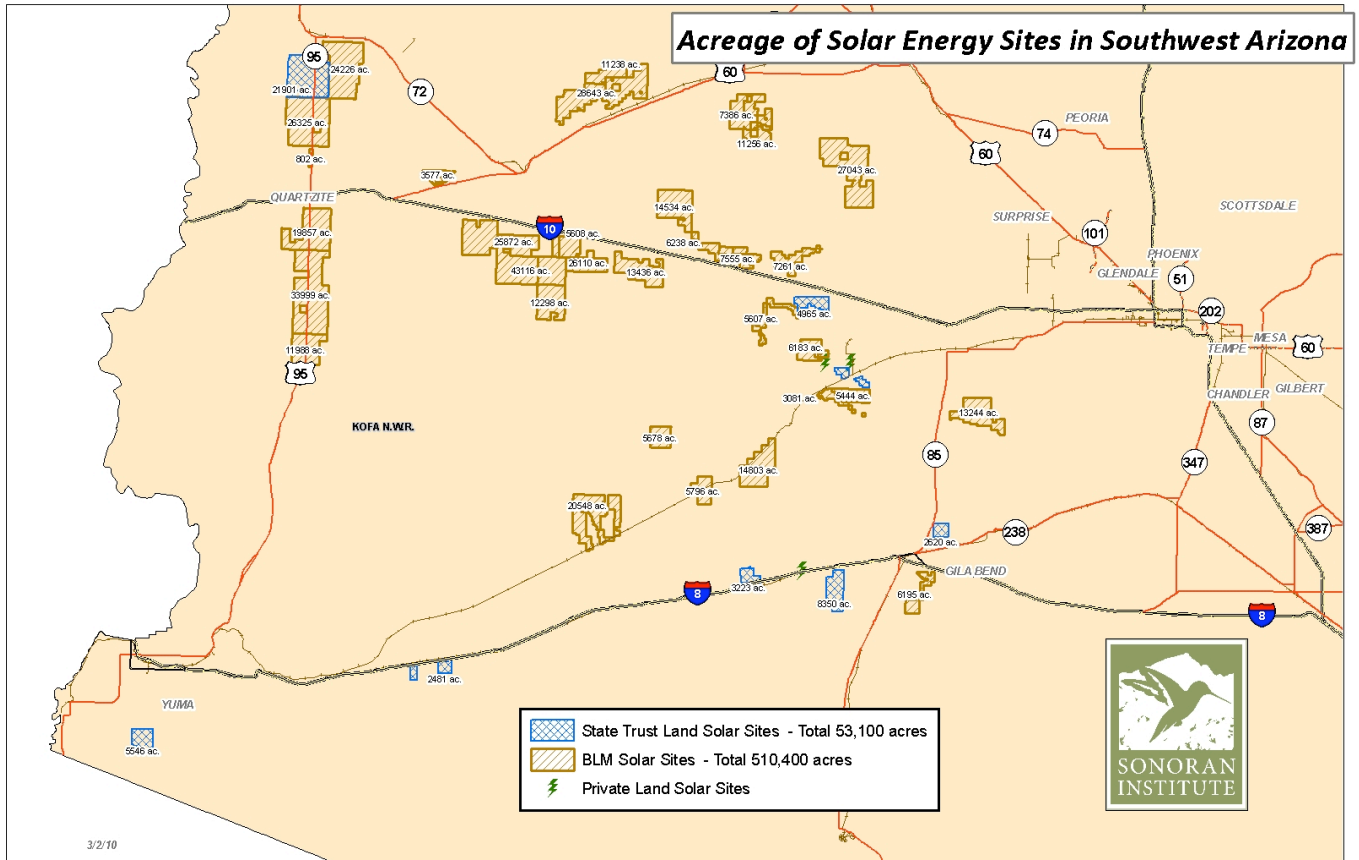
(C) An investigation into best practices for solar development on state trust lands, with emphasis on linkages between financing, regulatory development, and mapping/information development by state agencies.

The availability of land is only one of a series of critical factors in successful solar energy development. While critical, a solar energy program in Arizona is more likely to stand or fall depending upon the influence of other factors, such as financing and tax incentive programs, regulatory requirements and incentives, and other important siting constraints, including environmental requirements and transmission access. An assessment of successful programs and/or best management practices among state land departments and other state regulators might be very helpful in assessing how best to support solar energy development on state trust lands, as well as identifying useful practices that could translate to other states. For example, particularly when considered in comparison to other states, ASLD appears to have already engaged in substantial mapping exercises designed to highlight solar opportunities on state trust lands and to identify potential environmental and physical constraints on solar siting – a practice that could be replicated by other state land managers around the West.

Potential Solar Energy Sites in Southwest Arizona



Acreages of Solar Energy Sites



End Notes

- ¹ U.S. Department of Energy, Energy Information Administration. EIA Power Monthly, October 2008.
- ² Considine, T., McLaren, D. *Powering Arizona: Choices & Trade-Offs for Electricity Policy-A Study Assessing Arizona's Energy Future*. Report conducted by Arizona State University and The Communications Institute. 2008.
- ³ Arizona Corporation Commission, <http://www.cc.state.az.us/divisions/utilities/electric/environmental.asp>
- ⁴ Western Governor's Association's Clean and Diversified Energy Initiative. Solar Task Force Report. January 2006. <http://www.westgov.org/wga/initiatives/cdeac/Solar-full.pdf>
- ⁵ *Id.*
- ⁶ Arizona Climate Change Advisory Group. Arizona Climate Action Plan. August 2006. <http://www.azclimatechange.gov/download/O40F9347.pdf>
- ⁷ *Id.*
- ⁸ Renewable Energy Standard and Tariff Rules. Arizona Administrative Code R14-2-1801-1816.
- ⁹ *Id.*
- ¹⁰ Arizona Department of Commerce. Arizona Solar Electric Roadmap. January 2007. http://www.azcommerce.com/doclib/energy/az_solar_electric_roadmap_study_full_report.pdf
- ¹¹ Ariz. Rev. Stat. §§ 40-360 to 40-360.13 (2009).
- ¹² *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." Ariz. Rev. Stat. § 40-360(5).
- ¹³ 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 will be open to interested and affected individuals, groups, county and municipal governments and other public bodies[.]" Ariz. Rev. Stat. § 40-360(9).
- ¹⁴ Ariz. Rev. Stat. § 40-360.06(A).
- ¹⁵ *Id.* § 40-360.
- ¹⁶ *Id.*
- ¹⁷ Joe Gelt, Arizona Water Resource, September-October 2008 Vol. 17, No. 1, available at <http://cals.arizona.edu/azwater/awr/septoct08/d3aa3f8e-7f00-0101-0097-9f6724822dffw.html>. PV plants and some CPS technology such as the Sterling SunCatcher™ claim minimal or no water demands during energy production. See <http://www.tesseractosolar.com/north-america/technology.htm> (last visited Sept. 9, 2011).
- ¹⁸ Gelt, *supra* note 7; see also Hearing Transcript, IN THE MATTER OF THE APPLICATION OF STARWOOD SOLAR I, L.L.C., Arizona Power Plant and Transmission Line Siting Committee (October, 2009)
- ¹⁹ 42 U.S.C. §§ 4321 to 4370h.
- ²⁰ 25 U.S.C. § 3504
- ²¹ Solar Energy Development Programmatic Environmental Impact Statement Information Center. <http://solareis.anl.gov/eis/index.cfm>
- ²² See e.g., *Beacon Solar Energy Project: Application for Certification*, Cal. Energy Comm'n. Docket No. 08-AFC-2; *SES Solar One Project: Application for Certification*, Cal. Energy Comm'n. Docket No. 08-AFC-13.
- ²³ Based on confidential communications with selected major landowners in Maricopa County.
- ²⁴ Based on confidential communications with selected solar development enterprises seeking lands in Maricopa County.
- ²⁵ Culp, P., Laurenzi, A., Tuell, C. *State Trust Lands in the West: Fiduciary Duty in a Changing Landscape*. 2006. Lincoln Institute of Land Policy. Pg.3.
- ²⁶ See Summary of Public Scoping Comments Received During the Scoping Period for the Solar Energy Development Programmatic Environmental Impact Statement, U.S. Department of Energy and Bureau of Land Management (October 2008).
- ²⁷ Duda, J. "Arizona Land Department Will Be Self-Funded" Arizona Capitol Times. August 24, 2009.
- ²⁸ 251 U.S. 41 (1919).

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- ²⁹ 385 U.S. 458 (1967).
- ³⁰ Enabling Act § 28.
- ³¹ *C.f. Oklahoma Ed. Ass'n, Inc. v. Nigh*, 642 P.2d 230, 236 (Okl. 1982) (express designation of the school lands and funds as a "sacred trust" has the effect of irrevocably incorporating into the Enabling Act, Oklahoma Constitution, and conditions of the grant, all of the rules of law and duties governing the administration of trusts); *see also State ex rel. Ebke v. Board of Educ. Lands and Funds*, 47 N.W.2d 520 (Neb. 1951)(describing general fiduciary principles associated with trust management that are applicable to state trust land managers).
- ³² RESTATEMENT 2D, TRUSTS § 3.
- ³³ *Id.* at § 170.
- ³⁴ 76 AM. JUR. 2D *Trusts* § 93; RESTATEMENT 2D, TRUSTS § 379 (1959); RESTATEMENT 3D, TRUSTS § 379 (1992); FRATCHER, *supra* note 139, § 379.
- ³⁵ *Id.* at § 125.
- ³⁶ 76 AM. JUR. 2D *Trusts* § 58. *C.f. In re Trust of Brooke*, 697 N.E. 2d 191 (Ohio 1998) (trustee's discretion limited by terms of the trust).
- ³⁷ For example, despite the U.S. Supreme Court's more liberal interpretations of Enabling Act provisions to permit condemnations and land exchanges, the Arizona Supreme Court interpreted identical provisions in the Arizona Constitution to prohibit condemnations and exchanges. *See Deer Valley Unified School District v. Superior Court*, 760 P.2d 537, 541 (Ariz. 1988); *see also Fain Land & Cattle Co. v. Hassell*, 790 P.2d 242 (Ariz. 1990).
- ³⁸ GEORGE GLEASON BOGERT & GEORGE TAYLOR BOGERT, *THE LAW OF TRUSTS AND TRUSTEES*, 235-241 (2nd ed. 1978); *C.f. Re Hubbard's Will*, 97 N.E.2d 888 (N.Y. 1959) (trustee must subordinate his interest or resign in case of irreconcilable self-interest).
- ³⁹ *See Colorado State Board of Land Commissioners v. Colorado Mined Land Reclamation Board*, 809 P.2d 974 (Colo. 1991) (allowing mining permits on state lands to be denied where inconsistent with county zoning, even though this worked to the disadvantage of the trust); *see also Case v. Bowles*, 327 U.S. 92, 100 (1946) (upholding validity of federal legislation establishing price controls on timber sales on state trust lands); *see also Noel v. Coel*, 655 P.2d 245 (Wash. 1982) (requiring trust managers to follow requirements of state Environmental Policy Act even though this placed the trust at a significant disadvantage); *and see also Ravalli County Fish and Game Association v. Montana Department of State Lands*, 903 P.2d 1362 (Mont. 1995) (same).
- ⁴⁰ SOUDER & FAIRFAX, *STATE TRUST LANDS: HISTORY, MANAGEMENT AND SUSTAINABLE USE*, 163 (1996).
- ⁴¹ The State of Colorado requires trust managers to consider fiscal impacts on local communities before making trust dispositions.
- ⁴² RESTATEMENT 2D, TRUSTS § 227(a).
- ⁴³ 76 AM. JUR. 2D *Trusts* § 390.
- ⁴⁴ *Id.* at § 562.
- ⁴⁵ *Id.*
- ⁴⁶ RESTATEMENT 3D, TRUSTS § 227.
- ⁴⁷ *Id.*
- ⁴⁸ *See Haskell, The Prudent Person Rule For Trustee Investment and Modern Portfolio Theory*, 69 N.C. L. Rev. 87 (1990).
- ⁴⁹ *C.f. In Re Bank of New York*, 35 NY2d 512 (1974).
- ⁵⁰ 76 AM. JUR. 2D, TRUSTS § 404; *Branson School District. RE-82 v. Romer*, 161 F.3d 619, 637 (10th Cir. 1998) (common law trust doctrines require that a trustee must take steps to preserve the trust property from loss, damage, or diminution in value).
- ⁵¹ 958 F.Supp 1501 (D. Colo 1997).
- ⁵² *Id.* at 1517.
- ⁵³ *See A.R.S. §§37-211(D) and 37-212*
- ⁵⁴ *See A.R.S. §37-290.*
- ⁵⁵ *See A.R.S. §37-173.*
- ⁵⁶ *See A.R.S. 37-174.*
- ⁵⁷ *See A.A.C. R12-5-1101(4).*
- ⁵⁸ *A.A.C. R12-5-1101(5).*

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- ⁵⁹ See A.R.S. 37-132(B)(3).
- ⁶⁰ See A.R.S. §37-233.
- ⁶¹ See A.R.S. 37-331 et seq.
- ⁶² See A.R.S. 37-233(B).
- ⁶³ See A.R.S. §37-231(D).
- ⁶⁴ A.R.S. §37-231(A).
- ⁶⁵ A.R.S. §37-240.
- ⁶⁶ See A.R.S. §37-132(A)(5).
- ⁶⁷ A.R.S. §37-236(A).
- ⁶⁸ *Campana v. Arizona State land Dep't.*, 860 P.2d 1341 (Ariz. App. 1993).
- ⁶⁹ See A.R.S. §37-132(B)(3).
- ⁷⁰ See A.R.S. §37-241(B).
- ⁷¹ See A.R.S. §37-241(B).
- ⁷² See A.R.S. §37-241(D)&(E).
- ⁷³ See A.R.S. §37-244.
- ⁷⁴ See A.R.S. §37-245; *see also* A.R.S. §37-247.
- ⁷⁵ A.R.S. §37-246.
- ⁷⁶ A.R.S. §37-251.
- ⁷⁷ A.R.S. §37-251(B); *see also* A.A.C. R14-5-408.
- ⁷⁸ *Id.*
- ⁷⁹ Commercial leases in Arizona function as a “catch-all” category for uses that do not fall within the specified land-use categories (agriculture, grazing, home-site, minerals, etc.).
- ⁸⁰ A.R.S. §37-214(B).
- ⁸¹ A.R.S. §37-101(3).
- ⁸² A.R.S. §§ 37-281.02(A), 37-281.02(B).
- ⁸³ A.R.S. § 37-281.02(A).
- ⁸⁴ A.A.C. § R12-5-703(B).
- ⁸⁵ A.A.C. § R12-5-703(D).
- ⁸⁶ A.A.C. § R12-5-703(B).
- ⁸⁷ *Id.*
- ⁸⁸ A.R.S. § 37-281.02(A).
- ⁸⁹ See A.R.S. § 37-281.02(A) (If the state land is more than three miles outside the boundaries of incorporated cities and towns with a population of 10,000 or fewer people, or more than five miles outside the boundaries of incorporated cities and towns having a population of more than ten thousand people, ASLD shall cooperate with the county or counties in which the land to be leased is located in considering the intended uses).
- ⁹⁰ A.R.S. § 37-281.02(F).
- ⁹¹ A.R.S. § 37-281.02(G).
- ⁹² A.R.S. § 37-281.02(C).
- ⁹³ A.R.S. § 37-281.02(I).
- ⁹⁴ A.R.S. § 37-281.02(E).
- ⁹⁵ A.R.S. § 37-281.02(D).
- ⁹⁶ A.R.S. §37-214.
- ⁹⁷ A.R.S. §37-239(B).
- ⁹⁸ A.R.S. §37-239(C)(1).
- ⁹⁹ See A.R.S. § 37-132(5).
- ¹⁰⁰ New Mexico-Arizona Enabling Act 36 Stat. 557, § 28 (1910).
- ¹⁰¹ *C.f.* ARIZ. CONST. Art. X § 3 (interpreted to prohibit exchanges without public auction in *Fain Land & Cattle Co. v. Hassell*, 790 P.2d 242 (Ariz. 1990).
- ¹⁰² 385 U.S. 458 (1967).
- ¹⁰³ *Id.* at 465.
- ¹⁰⁴ *Id.* at 459-460.

¹⁰⁵ *Id.* at 469-470. Interestingly, the Court found that despite the public auction requirement, the state was not required to dispose of state highway rights-of-ways at public auction, since this provision had been included by Congress with the intent of preventing fraudulent dispositions to private parties. Since dispositions to the state for fair market value did not seem to fall within the category of dispositions that the provision was intended to protect against, and since the State Highway Department could condemn land purchased at auction by any potential alternative bidder (which would effectively chill the auction), the Court concluded that the auction requirement was unnecessary for dispositions of this type as long as the trust obtained the fair market value. *Id.* at 463-465.

¹⁰⁶ *Id.* at 469.

¹⁰⁷ *Deer Valley Unified School Dist. No. 97 of Maricopa County v. Superior Court*, 760 P.2d 537 (Ariz. 1988).

¹⁰⁸ *Arizona State Land Dept. v. Superior Court In and For Cochise*, 633 P.2d 330 (Ariz. 1981); *City of Sierra Vista v. Babbitt*, 633 P.2d 333 (Ariz. 1981).

¹⁰⁹ *Gladden Farms, Inc. v. State*, 633 P.2d 325 (Ariz. 1981).

¹¹⁰ *Campana v. Arizona State Land Dept.*, 860 P.2d 1341 (Ariz. 1993).

¹¹¹ *Fain Land & Cattle Co. v. Hassell*, 790 P.2d 242 (Ariz. 1990).

¹¹² *Forest Guardians v. Wells*, 34 P.3d 364 (Ariz. 2001).

¹¹³ *Havasu Heights Ranch and Development Corp. v. Desert Valley Wood*, 807 P.2d 1119 (Ariz. 1990); *see also State ex rel. McElroy v. Vesely*, 52 P.2d 1090 (N.M. 1935); *see also Ellison v. Ellison*, 146 P.2d 173 (N.M. 1944) (interpreting provisions of the Enabling Act to determine that lease renewal was not absolute right under New Mexico's trust system).

¹¹⁴ *Kadish v. Arizona State Land Dept.*, 747 P.2d 1183 (Ariz. 1988).

¹¹⁵ *State Land Dept. v. Tucson Rock & Sand Co.*, 469 P.2d 85 (Ariz. App. 1970).

¹¹⁶ *Campana v. Arizona State Land Dep't*, 176 Ariz. 288, 291, 860 P.2d 1341, 1344 (App. 1993); *see also Foster v. State Land Dept.*, 199 Ariz. 489, 19 P.3d 630 (App. 2001).

¹¹⁷ *Id.* at 291. The *Campana* case is quoting *Martori v. Ariz. State Land Dep't.*, 176 Ariz. 420 (App. 1993), which was subsequently vacated by the Arizona Supreme Court, explaining only that "a majority of the court entertained substantial reservations about the resolution of the issues by the court of appeals." *See Martori v. Ariz. State Land Dep't.*, 178 Ariz. 478 (1994). The *Campana* case has never been cited nor overturned by the Supreme Court, and remains valid law.

¹¹⁸ *Id.*

¹¹⁹ 186 P.2d 1341, 1344 (Ariz. App. 1993) (internal citations omitted).

¹²⁰ *Id.* at 1343.

¹²¹ *Id.* at 1344.

¹²² *Id.* at 1344-45.

¹²³ 212 P.3d 62, 74 (Ariz. App. 2009).

¹²⁴ *Id.* at 69, 74.

¹²⁵ *Id.* at 69.

¹²⁶ 764 P.2d 37, 44, 46 (Ariz. App. 1988).

¹²⁷ *Id.* at 43.

¹²⁸ *Id.* (In the same case, the court upheld the general concept of a "holding lease," including a condition requiring that the land not be put to any immediate use.)

¹²⁹ 34 P.3d 364, 369 (Ariz. 2001).

¹³⁰ *Id.* at 371.

¹³¹ An "injury-in-fact" exists where a plaintiff shows "an invasion of a judicially cognizable interest which is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical." *Bennett v. Spear*, 520 U.S. 154, 167 (1997).

¹³² *See Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83, 102-103(1998).

¹³³ 2 AM. JUR. 2D *Administrative Law* §430. The judicial doctrines governing standing helps to explain why state and federal courts have been somewhat inconsistent in their recognition of “special interest” standing in state trust “beneficiaries.” In various cases, courts have recognized standing in “beneficiaries” as varied as school districts and schoolchildren, *Branson School Dist. RE-82 v. Romer*, 161 F.3d 619, 631 (10th Cir. 1998); state educational organizations, *Oklahoma Educ. Ass'n, Inc. v. Nigh*, 642 P.2d 230 (Okla.1982); teachers and parents of school children, *Bartells v. Lutjeharms*, 464 N.W.2d 321, 322 (Neb. 1991); and county governments, *County of Skamania v. State*, 685 P.2d 576, 583 (Wash. 1984).; even as other courts have denied standing to these same types of individuals and entities under seemingly similar circumstances. See *ASARCO, Inc. v. Kadish*, 490 U.S. 605 (1989)(United States Supreme Court held that the Arizona Education Association lacked standing to challenge the validity of a statute regulating mineral leases on school lands, since a successful challenge would not necessarily result in more funding to schools since school funding was at the discretion of the legislature); *Essling v. Brubaker*, 55 F.R.D. 360 (D. Minn. 1971) (denying standing to schoolchildren on the basis that only schools, not schoolchildren, were properly beneficiaries of the trust); see also *Selkirk-Priest Basin Association, Inc. v. State*, 899 P.2d 949 (Idaho 1995) (denying standing to school children, parents, and environmental groups because they were not beneficiaries of the trust); see also *Director of Office of State Lands & Investments v. Merbanco*, 70 P.3d 241, (Wyo. 2003)(denying standing to a corporation to challenge a statute permitting land exchanges without a public auction, since they were not a beneficiary); see also *Brotman v. East Lake Creek Ranch, L.L.P.*, 31 P.3d 886 (Colo. 2001)(denying standing to a landowner to contest a land sale on the same basis); *Forest Guardians v. Powell*, 24 P.3d 803, 808 (N.M. Ct. App. 2001)(denying standing to schoolchildren, parents, and environmental groups since none had a sufficient “special and definite interest in the trust”).

¹³⁴ 2 AM. JUR. 2D *Administrative Law* § 489. See *Forest Guardians v. Wells*, 201 Ariz. 255 (2001) (Arizona Supreme Court found that the failure to consider a competitive bid application based on ASLD’s interpretation of law was subject to de novo review), *Id.* at 262.

¹³⁵ *Forest Guardians v. Wells*, 34 P.3d 364, 367-368 (Ariz. 2001) (state land commissioner has considerable discretion with regard to trust administration decisions that involve questions of fact).

¹³⁶ 2 AM. JUR. 2D *Administrative Law* § 488. This question is well-settled with regard to federal agency actions, but state courts are also in general agreement on this point. See *id.* at § 489. Where questions of law and fact are mixed, courts will generally interpret the law independently of the agency’s determination, but then apply this to the facts as found by the agency. See *id.* at § 496.

¹³⁷ *C.f. Foster v. Anable*, 19 P.3d 630, 633 (Ariz. App. Div. 1 2001) (Land Commissioner had broad discretion in dispositions of trust land, and would not be overturned absent abuse of discretion or illegal action). See also *Campana v. Arizona State Lands Dept*, 860 P.2d 1341 (Ariz. App. Div 1 1993); *Thompson v. Conwell*, 363 P.2d 927 (Wyo. 1961).

¹³⁸ *Jeppeson v. State, Dept. of State Lands*, 667 P.2d 428 (Mont. 1983), quoting *Taylor v. County Comm'rs* 270 P.2d 994, 999 (Mont. 1954), quoting *Grant v. Michaels*, 23 P.2d 266, 269 (Mont. 1933).

¹³⁹ ARIZONA STATE LAND DEPARTMENT 2005 ANNUAL REPORT (2005).

¹⁴⁰ 764 P.2d 37, 39 (Ariz. App. 1988).

¹⁴¹ *Id.*

¹⁴² *Id.* at 42.

¹⁴³ See *id.*; A.R.S. § 37-101(3).

¹⁴⁴ *Havasu Heights*, 764 P.2d at 42

¹⁴⁵ *Id.* Although the court held that the Department thus had the authority to enter into holding leases, it also found that the specific lease at issue included conditions that were invalid, *id.* at 44, and that the Department had entered into a “holding lease program” without a rulemaking, which would be required to implement such a program, *id.* at 46.

¹⁴⁶ A.R.S. § 37-241(A).

¹⁴⁷ see A.R.S. § 37-241(D) and A.R.S § 37-241(E). The commissioner also determines whether the interest rate will be variable or fixed. If a variable rate is appropriate, the state treasurer establishes the interest rate after taking into consideration statutorily prescribed factors. A variable interest rate may vary from year to year. A.R.S. § 37-241(D).

¹⁴⁸ A.R.S. §§ 37-241(B), 37-244(A).

¹⁴⁹ A.R.S. § 37-241.

¹⁵⁰ A.R.S. § 37-245(A).

¹⁵¹ See A.R.S. §§ 37-241(G), 37-251(A).

¹⁵² A.R.S. § 37-247(A).

¹⁵³ A.R.S. § 37-247(B).

¹⁵⁴ See A.R.S. § 37-132(5).

¹⁵⁵ 193 P.3d 776, 781 (Ariz. App. 2008).

¹⁵⁶ *Id.* at 782.

¹⁵⁷ 860 P.2d 1341, 1346 (Ariz. App. 1993).

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 1347.