# Background

The Utah legislature enacted H.B. 148 into law in March 2012. In part, the bill says:

- 147 63L-6-103. Transfer of Public Lands
- 148 (1) On or before December 31, 2014, the United States shall:
- 149 (a) extinguish title to public lands; and
- (b) transfer title to public lands to the state.
- 151 (2) If the state transfers title to any public lands with respect to which the state receives
- title under Subsection (1)(b), the state shall:
- 153 (a) retain 5% of the net proceeds the state receives from the transfer of title; and
- (b) pay 95% of the net proceeds the state receives from the transfer of title to the
- 155 United States.

The federal public lands to be transferred included all federally owned and managed lands in Utah except national parks, national monuments (but not Grand Staircase-Escalante), the Golden Spike National Historic Site, national wilderness areas, federal lands within municipal boundaries, Department of Defense lands, and tribal lands. [Note: Bears Ears National Monument had not been created when the legislation was passed.]

Such legislation has been considered in other Western states, *e.g.*, Nevada, Arizona and New Mexico, but has not been formally enacted except in Utah and Nevada. The federal government has not acted on Utah's demands or on the demands of any other state.

Subsequently, the legislature enacted H.B. 142 into law in 2013 to require the Public Lands Policy Coordinating Office to "conduct a study and economic analysis of the ramifications and economic impacts of the transfer of public lands" (H.B. 142 lines 106-7). The report, *An Analysis of a Transfer of Public Lands to the State of Utah* was submitted in November 2014 by authors from the University of Utah Bureau of Economic and Business Research, Utah State University, and Weber State University. (Note that this means that data cited in the analysis report and in this overview are generally from the period FY2012-FY2014 but occasionally go back as far as FY2008. Note also that is seems to have been premature for the legislature to have passed the 2012 legislation demanding transfer by December 2014 the year before it commissioned the study.)

Although the analysis report is specific to Utah, it seems reasonable to assume that the issues and impacts related to transferring public lands to state ownership and management will be similar and relevant in other Western states.

H.B. 148 demands the transfer of 31.2 million acres or over 60% of Utah's land area. Less than 5% of Utah lands would remain under federal control.

Utah currently owns and manages 10% of Utah lands comprising 5.4 million acres; the primary state land management agencies are the School and Institutional Trust Lands Administration (SITLA, 3.4 million acres) and the Department of Natural Resources (DNR, 2 million acres).

The land transferred would be from the Bureau of Land Management (BLM), the U.S. Forest Service (USFS), the U.S. Fish and Wildlife Service (USFWS, wildlife refuges and fish hatcheries), and the National Park Service (NPS, only the Utah portion of the Glen Canyon Recreation Area). The acreage

managed by these agencies varies widely from the BLM (22.8 million acres) to the USFS (8.2 million acres) to the NPS (1.2 million acres of Glen Canyon) to the USFWS (~113,000 acres).

Federal wages and spending by the BLM, USFS and USFWS inject out-of-state money into Utah's economy. These dollars support just under 5,000 Utah jobs, generate \$236 million in wages and salaries, and contribute nearly \$200 million to Utah's gross state product. The study estimates that the transfer of federal lands would immediately result in the loss of about \$150 million in federal payroll while state and local governments would lose \$16 million in taxes.

#### **Costs and Revenues**

Whether expected revenues from the transferred lands would be sufficient for the state of Utah to cover the costs of managing those lands was a major focus of the study.

As background, the study compares several efficiency measures for federal and state land management agencies; selected results for the comparable agencies managing the largest number of acres are shown in the table below (data from Tables 3.19a and 3.20 in the report). While these statistics appear to show that the state agencies are more efficient than the federal agencies and therefore might be able to manage the transferred lands at a lower cost or for greater revenue, it is important to note key differences between the federal and state agencies:

- The BLM and SITLA manage similar types of lands; in fact, SITLA holdings are often interspersed with BLM lands. However, while the BLM has a multiple-use, sustained-yield mandate, SITLA manages under a profit-maximization mandate.
- While the BLM allows generally free access to its lands, SITLA lands are usually not publicly accessible.
- The Division of Forestry, Fire and State Lands (FFSL, under DNR) must allow public access to navigable waters in Utah; it is also responsible for fire suppression on state and private lands outside city limits.
- FFSL does not currently manage forests, however, and would therefore need to develop a forest management plan. The USFS, like the BLM, manages under a multiple-use, sustained-yield mandate; the mandate for FFSL's forest management is not yet defined.
- Data in the table include wildfire management costs incurred by each agency.

Table 1

Measure	BLM	SITLA	USFS	FFSL
	Federal	State	Federal	State
Acres in Utah (millions)	22.8	3.4	8.2	1.5
Full-Time Equivalent Employees (FTE)	774	70	1,041	197
Revenue per \$ Spent	\$2.75	\$7.58	\$0.07	\$0.41
Acres Managed per FTE	29,528	48,599	7,834	15,487
Revenue minus Cost (millions)	\$215.8	\$79.9	-\$99.7	-\$14.3
Revenue minus Cost per FTE	\$278,874	\$1,142,015	-\$95,809	-\$72,570

Costs of Managing the Transferred Lands

The BLM, USFS and USFWS combined spent \$247 million in direct costs in 2012 to manage the lands that would be transferred.

The study estimates that it would cost \$248 million – nearly the same as in 2012 – to manage the transferred lands in 2017, the assumed first full year the state would control the lands. This estimate assumes that transferred lands would be managed for their current purposes, including rangelands, forests, and wildlife refuges and fish hatcheries.

In addition to the direct costs, the state would need to take over the federal payments in lieu of taxes (PILT) that the federal government now pays to counties because federal lands are not subject to local property taxes. This additional cost is estimated at \$31.7 million. The total cost for Utah to manage the transferred lands is thus estimated to be close to \$280 million.

The study notes that nearly 35% of the direct cost of managing the lands is for wildfire and that 90% of the total costs for wildfire in Utah were paid by the BLM and/or the USFS. Transferring the lands to the state would mean that the state would bear the full cost of this highly unpredictable expense. Utah would also lose access to federal aircraft and aviation support infrastructure, coordinated dispatch centers, and other equipment and services currently supplied by federal agencies when wildfires occur. Although historically Utah does not experience high fire frequency and size compared to other Western states, because fire is so unpredictable, a severe fire season would impact Utah's financial situation much more significantly under state control than under the current federal control.

The authors have identified a state agency capable of taking over for the federal agencies involved for each identified purpose but they assume that wildfire management would be consolidated under a new state agency. The analysis therefore separates out costs currently incurred by the federal agencies for wildfire management into a separate category.

Because: 1) Utah currently does not own or manage any forests other than those managed by SITLA and 2) the authors do not believe its forestry program is a good model for managing the transferred forested land, the FFSL estimate is based on data from states with similar forest characteristics. Estimates exclude the one-time costs FFSL would incur to develop a forest management plan, possibly as much as \$3/acre for the 8+ million acres transferred.

Estimates by purpose for 2017 are shown in the table below (from Table 3.27 in the report); the estimates are based on 31.2 million acres demanded by H.B. 148.

Table 2

Land Type	Current Federal	Proposed State Agency	Estimated 2017 Cost
	Agency		(millions)
Rangelands	BLM	SITLA	\$83.9
Forests	USFS	FFSL	\$54.7
Wildlife Refuges and	USFWS	Division of Wildlife	\$5.4
Hatcheries		Resources	
Glen Canyon NRA (Utah	NPS	Division of State Parks and	\$16.6
portion)		Recreation	
Wildfire Management	BLM, USFS	Agency TBD	\$87.4
Total Land			\$248
<b>Management Cost</b>			
Federal PILT			\$31.7
<b>Grand Total Cost</b>			\$279.7

## Revenues from the Transferred Lands

In 2013, BLM and USFS generated \$331.7 million in revenues. The largest source, 93% of the total (\$308 million), came from mineral lease royalties with nearly \$257 million (83% of total royalties) from oil and gas and another \$28.6 million from coal. An additional \$15.7 million was generated by the BLM primarily from rights-of-way rents and from recreation and grazing fees. The USFS generated \$8 million primarily from recreation fees and permits and from power project rights-of-way rents. Of these dollars, the state received about \$150 million or 45% of the total; this includes 50% of the mineral lease royalties (less a small fee paid to the Office of Natural Resources Revenue, Department of Interior).

## Oil and Gas

Because oil and gas revenues make up such a large percentage of the revenues generated by public lands in Utah now, the study authors modeled revenues in future years under multiple scenarios. Variables included the prices of oil and gas, the share of royalty revenue received by the state on current and new production (currently 50% for both; the other 50% goes to the federal government), the royalty rate for new production only, and the number of new wells drilled.

The modeling used two price scenarios based on 2013 actual prices:

- The Reference Price scenario was set at \$92/barrel for oil and \$5.10/thousand cubic feet for gas.
- The Low Price scenario was set at \$62/barrel for oil and \$3.30/thousand cubic feet for gas. Note that as of 11/7/2017, closing oil prices in 2017 have ranged between \$42.53 and \$57.17 per barrel; natural gas prices have ranged between \$2.564 and \$3.761 per thousand cubic feet. (CNBC.com). Thus model results in the current price environment are optimistic even with the Low Price scenario.

The modeling exercise showed that the commodity price and the share of royalty revenue allocated to the state are the key drivers of total revenues. The Reference Price models show that oil and gas revenues would only cover the anticipated \$280 million cost for the first two years of transfer (2017 and 2018) **if** oil and gas prices remain at the Reference Price level **and if** more new wells are drilled with a 100% royalty share. Increasing the state's royalty share on all production to 100%, again with the Reference Price scenario, would also generate sufficient revenue to cover the cost. If either of these

sets of conditions is not met, the state could not cover costs for at least 3-5 years even if the Reference Price scenario holds.

With 2017 oil and gas prices below even the Low Price scenario and natural gas prices only occasionally higher than the Low Price scenario, this price scenario is even more negative on the revenue side. The models here cannot cover the projected costs with oil and gas revenue unless the state royalty share increases to 100%. With the most conservative Low Price scenario – that is, no changes to royalty rates, state shares or production levels - these revenues are projected at only \$226.8 million in 2017.

The study recommends that if the transfer occurs, negotiating a higher state share of the oil and gas royalties should be a high priority. It also points to other possible mineral sources of revenue including increased production of coal and uranium, base minerals (copper, beryllium, magnesium, molybdenum), industrial minerals (potash, salt, magnesium chloride, gilsonite). The authors also mention future oil shale production but only when extracting Utah's oil shale becomes economically viable. Even at the higher Reference Price for oil, it has apparently not been viable.

#### Coal

Over the span 2003-2013, annual coal royalties have averaged \$28.6 million and have been relatively stable, but economic, geologic, technical and political factors all impact how significant coal mining can be as a future revenue source for Utah. Estimates for three scenarios were generated; all assume declining production at existing mines but differ by how much production can be obtained from new mines. Significantly, the high estimate assumes the state gains control of the Grand Staircase-Escalante National Monument and begins mining in its Kaiparowits coal field. [Note: downsizing the monument will increase the likelihood of mining this coal field if it is economically feasible.]

For 2017, the estimates for coal revenues for all scenarios range are the same at \$50.6 million, but only the high production scenario generates increasing revenues over time.

#### Other Revenue Sources

There are a few other smaller revenue sources for the state if the land transfer is completed, i.e.,

- Mineral lease payments, other than royalties, averaged \$29 million from 2009-2013.
- Other revenues from BLM lands averaged \$9.8 million from 2008-2012.
- Other revenues from USFS lands averaged \$7.3 million from 2008-2012.

These sources add a total of about \$46 million to the projected revenue from the transferred lands.

Costs vs. Revenues from the Transferred Lands

The most conservative 2017 oil and gas projections (\$226.8 million) added to the coal projection (\$50.6 million) equals \$277.4 million, nearly equal to the \$280 million projected cost to manage the transferred land. With the additional \$46 million from the other sources above, it appears on the surface that Utah could cover the costs of managing the transferred land. In fact, the overall conclusion of the Utah study (page xxxii):

"In conclusion, from a strictly financial perspective, it is likely that the state of Utah could take ownership of the lands and cover the costs to manage them. Our research also suggests that it could put a strain on the state's funding priorities in the early years as the state adjusts to the loss of federal dollars, evaluates land resources and conditions, and develops programs to replace those now managed by federal agencies."

There are, however several considerations the study discusses which the authors did not factor into their overall conclusion.

As noted previously, even the Low Price scenario is above 2017 oil and gas average prices; this means that even this most conservative estimate for oil and gas revenue is likely too high unless royalty shares and/or rates can be renegotiated and/or production can be significantly increased.

The entire discussion above assumes that the revenues from the transferred lands would all be available to pay the costs of managing the newly acquired lands. However, Utah currently receives a share of revenues generated on public lands (\$150 million in 2013); these dollars are already allocated to state agencies, including the Department of Transportation and the Permanent Community Impact Fund, and are also used to fund the state analogue to federal PILT. If the land transfer happens, new funds would have to be found for these obligations. (It is not at all clear why the report did not factor this \$150 million in lost revenue into their analysis; doing so would bring the total revenue needed to cover costs to \$430 million.)

The report mentioned the need for FFSL to prepare a forest management plan at an estimated \$3/acre but did not include this cost as a line item. With 8.2 million forest acres transferred, this would be a one-time cost to the state of \$24.6 million, possibly spread over the initial period of the transfer. The state would have to identify a funding source for this activity.

Other costs not factored into the cost estimate above include deferred maintenance on federal lands. The federal agencies are required to provide access to and manage programs related to federal lands even without sufficient budget dollars to meet their needs. Utah must have a balanced budget. At the time of the Utah study, the estimated deferred maintenance backlog for the BLM and USFS combined was \$100 million; this would become a state liability. Clean-up and remediation of between 8,000 and 11,000 open sites, including remediation of water quality issues, would also become a state liability, estimated at \$26-30 million.

On the revenue side, if the lands transferred from BLM to SITLA were managed with its revenue-maximizing mandate, those revenues might be expected to increase. On the flip side, if a change in management negatively impacted any current revenue-generating uses of the lands, any increases would be offset. The report does not attempt to project any impacts of changes in use of any of the land categories.

Taking these additional considerations into account, and assuming that the current uses of the lands are not changed, it seems less likely that Utah could generate sufficient revenue to cover its costs to manage the transferred lands.

# **Economic Impacts of Activities on Federal Lands**

Activities on public lands, including recreation, grazing, and timber production also have an economic impact on Utah. In 2013, nearly 29,000 jobs related to these activities generated \$1.6 billion in earnings, contributing \$3.6 billion to Utah's gross state product. State and local governments collected \$788 million in taxes.

Net Consumer Benefit

Recreational activities, including hiking, camping, hunting, fishing, wildlife watching and simply enjoying scenic vistas, improve the quality of life of Utah residents and visitors. These improvements

have value – a net consumer benefit or consumer surplus - that is not captured by traditional market dollar measures. Net benefit in this context is defined as the difference between what consumers are willing to pay for a recreational activity and what they actually pay. It is analogous to profit but is realized in non-monetary terms by the consumer, not by the seller of the activity. It can be thought of as an incentive for people to spend money on travel and recreation if they expect to receive more value than the cost of the activity.

Economists have developed methods for estimating net benefit in dollar terms. These estimates can assist land managers, whether federal, state or local, to better manage their land portfolios to provide maximum value to citizens and to allocate scarce resources more efficiently.

The study used existing databases of estimates derived using two different methods for the net benefit various recreational activities provide to consumers in the mountain region (U.S. Census Division 8). The data primarily reflect activities on land managed by the BLM and USFS.

Fourteen recreational activities were included in the study analysis with day hiking and mountain biking contributing nearly 40% to the total net consumer benefit. Least beneficial are small game and waterfowl/migratory bird hunting. (Note that the estimates for net benefit do not include skiing on public lands because data were not available.)

Assuming the transferred lands continue to be managed for the same purposes, the Utah study estimates that the total annual value of travel and recreation in Utah is \$16.9 billion. This is the sum of \$9.8 billion in consumer spending by both residents and non-residents and a total of \$7.1 billion in net consumer benefit (to Utah residents only except for fishing, hunting and viewing wildlife). (It is not clear why the net benefit estimate omits the benefit to non-residents for other activities.)

The value consumers place on outdoor activities means that land managers should maintain or improve the quality of recreational experiences or risk losing these societal benefits. If managers decrease access or act to degrade experiences by, for example changing the management mandate, consumers will be less willing to spend their dollars to travel and/or participate. Any economic analysis of land management policy should include this kind of net benefit analysis.

### **Public Lands and Economic Growth**

Another consideration in the analysis is whether transfer of federal public lands to the state can be expected to increase economic growth. The Utah study built models at the county level to determine the relationships among public land ownership in Western states and measures of economic growth.

Under federal ownership, the models show that modest amounts of federally owned land managed for multiple uses are associated with faster economic growth, but as the percentage of federal land in the county increases, growth slows and turns negative. The turning point varies by county but is typically in the range of 40-45%, a level found in 20 of Utah's 29 counties. The relationship is strongest for income growth and in-migration; it is weakest for employment growth where the percentage of federal land in the county has very little impact.

Under state ownership, the models show the opposite: increasing the percentage of state-owned land in a county above about 15% increases income growth, in-migration and employment growth. Note, however, that very few counties in the analysis have a high percentage of state-managed land, making the estimates more uncertain.

See Appendix 1 for sample graphs showing these general relationships for income growth.

The authors discuss three caveats related to this analysis:

- 1) These models of economic growth do not consider the characteristics of the public lands in each county, *i.e.*, whether they are energy-rich, suited for agriculture or recreation, etc.
- 2) Counties are political units, not economic or demographic units. Data is available at the county level, however, so they were used as the unit of analysis.
- 3) Public lands are often the 'leftover' acreage after private individuals selected the best land for agricultural or mineral uses, meaning that the public lands may be less well-suited to generate economic growth regardless of whether they are state or federal lands.

The study authors argue that one reason for the difference in the impacts of federal vs. state ownership may be the greater burden of federal regulations. They cite the National Environmental Policy Act (NEPA) as being especially burdensome with its requirements for an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) for land management plans. Higher percentages of federal land may lead to management stasis and be one cause of decreased economic growth. State-owned land, like federally owned land, is subject to the Clean Air Act, the Clean Water Act and the Endangered Species Act but it is not subject to NEPA requirements unless federal funding or permitting is required.

A more detailed analysis using the characteristics of the land in each county and the economic conditions of its region was also conducted. The details are beyond the scope of this overview, but the overall conclusion is that, regardless of federal or state land ownership, economic growth is highly dependent on characteristics of the land in each county and the regional economy.

# **Public Education Financing**

It appears that one major motivation for Utah's attempt to transfer federal lands to state ownership is to generate increased funding of Utah public schools.

Utah's largest state land holdings are the School and Institutional Trust Lands Administration (SITLA). Revenue generated on these lands, by law, goes to the State Permanent School Fund but only the Fund's dividend and interest income can be distributed to Utah public schools. The Fund's balance is more than \$1.6 billion and in FY2014 it distributed \$37.4 million to the schools.

As stated earlier, SITLA's mandate is to manage its lands to maximize revenue. However, because of how state trust lands were granted to the state, its lands are scattered throughout the state and in some places are surrounded by federal lands. This can make development of SITLA lands problematic and, in fact, can result in federal agencies becoming the de facto managers of the lands.

The argument is that transferring the federal lands to state ownership would allow SITLA to better develop its lands and to ultimately generate more revenue for Utah public schools.

#### **Notes**

1) The full report can be found at: <a href="http://publiclands.utah.gov/wp-content/uploads/2014/11/1.%20Land%20Transfer%20Analysis%20Final%20Report.pdf">http://publiclands.utah.gov/wp-content/uploads/2014/11/1.%20Land%20Transfer%20Analysis%20Final%20Report.pdf</a>

2) The report does not address the possibility of Utah selling off some of the transferred lands.

Appendix 1: Modeled County Income Growth as a Function of % of Federal or State Multiple Use Land Ownership (p. 199, Utah Study Report)

