

State of Nevada
Governor's Finance Office
Division of Internal Audits

Audit Report

**Department of Conservation and
Natural Resources**

Nevada Division of Forestry

Overtime

**NDF access to NDOC inmate labor is essential to controlling
firefighting costs and mitigating fire risk throughout the state.**

DIA Report No. 21-06
June 29, 2021

EXECUTIVE SUMMARY
Nevada Division of Forestry
Overtime

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Objective 1: Validate Updated Overtime Policies and Procedures

Continue Successful Overtime Monitoring..... page 2

Continuing the successful efforts to monitor overtime will help control Nevada Division of Forestry's (NDF) personnel costs. As a proactive response to the Division of Internal Audits' audit of the Nevada Department of Corrections Overtime Management (DIA Report No. 18-01), NDF updated policies and procedures on overtime and stand-by pay in January 2020. As a result, NDF has seen significant improvement and a steady decrease in overtime since the update. Overtime has decreased by 32% since fiscal year 2019.

NDF's improved performance was blunted with the closure of the Ely Conservation Camp in July 2020. NDF camp crew supervisors are being used in firefighting roles because fewer Nevada Department of Corrections' (NDOC) inmates were available. The higher cost supervisors performing inmate roles will increase overtime costs in fiscal year 2021.

Objective 2: Assess the Impact on Overtime from the Ely Conservation Camp Closure

Coordinate with NDOC to Re-establish Inmate Workforce..... page 5

Coordinating with NDOC, NDF could generate up to \$3.9 million in benefits from federal cooperators, local jurisdictions, and other entities from a cost-efficient inmate workforce. The inmate workforce provides for community clean up; fuels and resource management; wildland fire suppression activities; emergency responses; and other community support.

With the closure of the Ely Conservation Camp and loss of the inmate workforce in fiscal years 2020-2021, NDF was unable to respond to 11 fires and complete 14 missions normally performed during the year to provide fuel reduction and fire suppression activities. These activities would have resulted in \$2.2 million in revenues from federal cooperators, local jurisdictions, and other entities.

Without the Ely Conservation Camp inmate workforce, NDF is limited in providing cost-efficient wildfire management for the state. The increased risk is valued at \$1.7 million for the remainder of fiscal year 2021 and beyond for fires not responded to and suppression missions not completed. Moreover, some inmates lose an opportunity to benefit from valuable life skills to help them transition back to society and earn a wage to, in part, make victims' restitution payments as well as an opportunity to shorten their sentence.

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INTRODUCTION

At the direction of the Executive Branch Audit Committee, the Division of Internal Audits (DIA) conducted an audit of the Department of Conservation and Natural Resources, Nevada Division of Forestry (NDF). The audit focused on overtime. The audit's scope and methodology, background, and acknowledgements are included in Appendix A.

DIA's audit objectives were to develop recommendations to:

- ✓ Validate updated overtime policies and procedures.
- ✓ Assess the impact on overtime from the Ely Conservation Camp closure.

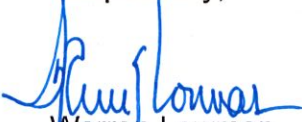
Division of Forestry Response and Implementation Plan

DIA provided draft copies of this report to NDF for review and comment. DIA considered NDF's comments in the preparation of this report; NDF's official response is included in Appendix B. In its response, NDF accepted the audit recommendations. Appendix C includes a timetable to implement the recommendations.

NRS 353A.090 requires within six months after the final report is issued to the Executive Branch Audit Committee, the Administrator of the Division of Internal Audits shall evaluate the steps NDF has taken to implement the recommendations and shall determine whether the steps are achieving the desired results. The administrator shall report the six-month follow-up results to the committee and NDF.

The following report (DIA Report No. 21-06) contains DIA's *findings, conclusions, and recommendations*.

Respectfully,



Warren Lowman
Administrator

Validate Updated Overtime Policies and Procedures

The Nevada Division of Forestry (NDF) can validate updated policies and procedures by continuing to monitor overtime requests and timesheet submissions. Continuing NDF's improved monitoring efforts will help ensure proper payroll and overtime use and control overall firefighting costs.

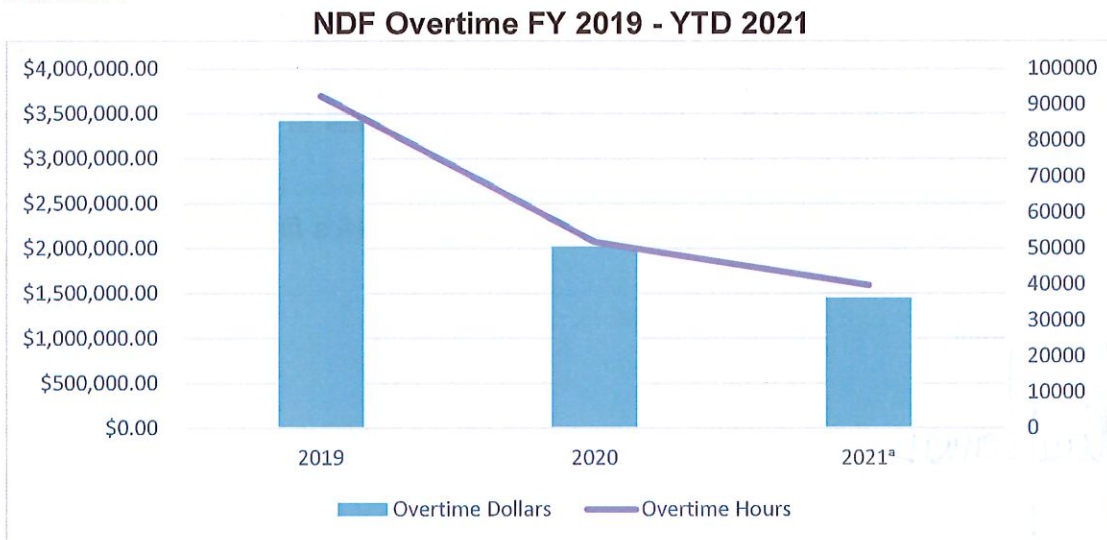
Continue Successful Overtime Monitoring

NDF should continue successful overtime monitoring. NDF began monitoring overtime requests and timesheet submissions based on updated policies and procedures to control personnel expenses and ensure proper payroll and overtime use. Proper payroll and overtime use will help NDF continue to control overall firefighting costs.

Updated Policies and Procedures Help NDF Control Costs

As a proactive response to DIA's audit of the Nevada Department of Corrections, NDF updated policies and procedures on overtime and stand-by pay in January 2020.¹ As a result, NDF has seen significant improvement and a steady decrease in overtime since the update. Overtime has decreased by 32% since fiscal year 2019. See Exhibit I for NDF overtime use.

Exhibit I



Source: DIA analysis of State of Nevada HR Data Warehouse.
Table Note ^a: As of 2nd quarter, fiscal year 2021.

¹ DIA Report No. 18-01, Correctional Officer Overtime Management.

Pay Period Reviews Helped Reduce Overtime Use

NDF's updated policies and procedures provide for a detailed review of overtime each pay period. These reviews helped reduce NDF's overtime use. The payroll clerk prepares a weekly "OT Report." The State Fire Warden reviews and approves the report to ensure supporting documentation and approvals are appropriate and leave is not recorded in the same week as overtime.

New Policies and Procedures Improved Overtime Use

To determine the efficacy of NDF's updated policies and procedures, DIA reviewed a sample of timesheets from fiscal years 2019 and 2021 for the highest overtime users. In fiscal year 2019, 2% of the sample included instances of leave taken and overtime worked within the same work week. The review showed no instances of leave taken in the same week as overtime worked since January 2020 when the updated policies and procedures became effective.²

Active Fire Season and Camp Closure Increases Overtime Costs in FY 2021

A 38% decrease in fire incidents from fiscal years 2019-2020 impacted overtime. Following an active fire season across Nevada and California in fiscal year 2021, overtime hours for NDF firefighters increased 9% over the past year-to-date, pushing overtime wages to nearly \$1.4 million.³

The significant factor driving the projected increase in overtime in fiscal year 2021 is the closure of the Ely Conservation Camp in eastern Nevada in July 2020. Conservation camp crew supervisors are being used to fight wildfires and perform other NDF projects because fewer NDOC inmates were made available. Using higher cost supervisors will increase overtime costs throughout fiscal year 2021.

NDF Overtime Success Blunted and Higher Labor Costs Without Inmate Workforce

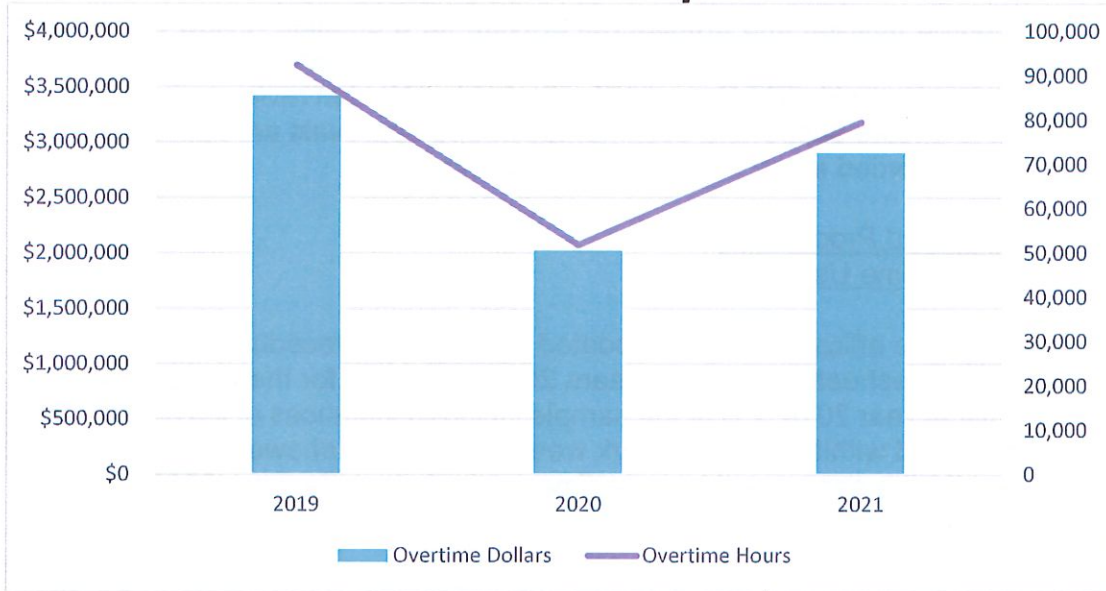
With the closure of the Ely Conservation Camp, NDF operations changed. It became necessary to use camp crew supervisors to respond to wildfires as well as fuel reduction and land protection missions normally performed by inmate crews. This unplanned and unexpected operational necessity blunted NDF's success at controlling overtime costs. Going forward, using camp crew supervisors for wildfire and fuel reduction missions, NDF could pay over eight times of its normal costs to respond to fires without inmate crews. See Exhibit II for projected fiscal year 2021 overtime costs for using camp crew supervisors in a firefighting role.

² As of 2nd quarter, fiscal year 2021.

³ Ibid.

Exhibit II

NDF Overtime FY 2019 - Projected 2021



Source: DIA Analysis of State of Nevada HR Data Warehouse.

Conclusion

NDF reduced overtime costs by 32% by implementing new policies and procedures monitoring overtime requests and timesheet submissions. NDF's improved performance was blunted with the closure of the Ely Conservation Camp and the operational necessity to use camp crew supervisors in firefighting roles. Continuing the successful efforts to monitor overtime will help control NDF's personnel expenditures and overall firefighting costs.

Recommendation

1. Continue successful overtime monitoring.

Assess Impact on Overtime from Ely Conservation Camp Closure

The Nevada Division of Forestry (NDF) can assess the impact on overtime from the closure of the Ely Conservation Camp and coordinate with the Nevada Department of Corrections (NDOC) to re-establish an inmate workforce in eastern Nevada. A continuing assessment will help direct resources where most efficiently and effectively used in firefighting and mitigating fire risk throughout the state.

The assessment would include analyzing an inmate workforce:

- for wildland fire suppression activities and emergency responses;
- to perform fuels and resource management; and
- for community clean-up activities and other community support.

Re-establishing an inmate workforce in eastern Nevada could result in \$3.9 million in benefits to the state for conducting firefighting and other camp projects (missions). The inmate workforce will help mitigate fire risk throughout the state.

Coordinate with NDOC to Re-Establish Inmate Workforce

NDF should coordinate with NDOC to re-establish an inmate workforce in eastern Nevada which could result in up to \$3.9 million in benefits from for firefighting activities. An inmate workforce will allow NDF to properly use conservation camp crew supervisors as outlined in NAC 284.150.

Currently, camp crew supervisors in eastern Nevada are providing fire suppression and other fuel reduction duties normally performed by inmate firefighting crews. NDF can save \$54 per hour in payroll and overtime costs for firefighting efforts from using the more cost-efficient inmate workforce.⁴

NDF Could Not Effectively Respond from Closure of Ely Conservation Camp

The closure of NDOC's Ely Conservation Camp limited NDF's ability to effectively respond to fires and other missions in eastern Nevada. The camp closure in July 2020 reduced NDF's revenues through the second quarter fiscal year 2021 by \$2.2 million from federal cooperators, local jurisdictions, and other entities. Routinely scheduled missions, including valuable fire suppression activities benefiting the state and local communities were not completed because NDF did not have enough inmate labor available to use for these missions.

⁴ NDF Crew Supervisor average cost per hour \$56 - Cost of inmate per day \$2.23 = \$53.77 ~ \$54 per hour savings

Ely Conservation Camp Provided a Third of NDF Inmate Workforce

Ely Conservation Camp provided 31% of NDF's inmate workforce to accomplish firefighting and other missions. NDF trained inmates to work with firefighting crews during fire season at Ely Conservation Camp. Additionally, inmates historically accomplish community work, clean up, and snow removal outside of fire season throughout eastern Nevada.



At the time of closure, July 2020, the camp count was 120 inmates. Upon closure, inmates were transferred to other conservation camps.⁵ The camp was overseen by Ely State Prison located in Ely, Nevada. The fire suppression mission is managed daily by the Camp Supervisor, an NDF employee.

NDF Could Not Complete \$2.2 Million in Missions

Due to the loss of the inmate workforce, NDF was unable to complete missions normally performed during the year to provide fuel reduction and fire suppression activities. These activities would have resulted in \$2.2 million in revenues from federal cooperators, local jurisdictions, and other entities:

- 11 fires Ely Conservation Camp would have responded to resulted in lost revenues of \$465,000;
 - Other NDOC conservation camps, local fire departments, and federal cooperators (BLM and USFS) responded to the fires at higher costs due to longer travel distances and increased rates of pay above the Ely inmate workforce.
- 16 missions affected;
 - 14 missions not completed with a loss of revenue of \$1.5 million;
 - 2 missions completed using camp crew supervisors, with revenues of \$55,000; netting \$1.4 million; and
- Trend analysis of a 24-month average for fiscal years 2015-2020 shows \$244,000 of estimated revenues lost; \$60,000 from inmate labor and \$184,000 from camp supervision.⁶

⁵ Wells Conservation Camp (Northeast Nevada), Carlin Conservation Camp (North Central Nevada) Humboldt Conservation Camp (Northwest Nevada), Pioche Conservation Camp (Southeast Nevada), and Three Lakes Valley Conservation Camp (West Central Nevada). See Appendix D for map.

⁶ July, August, September, October monthly invoices for Ely Conservation Camp for fiscal years 2015-2020.

Inmate Work Crews are Crucial in Managing Fire Suppression Costs

In fiscal years 2019-2020, NDF responded to 413 emergency fire incidents with a total cost of approximately \$38 million, making the average cost of a fire about \$92,000. By comparison, without the inmate workforce, costs would have been 8 times more or \$300 million, making the average cost of a fire about \$736,000. See Exhibit III for workforce cost per day.

Exhibit III

Workforce Cost per Workday Comparison

Crew Personnel	Crewman	Cost/Day or Hour	Total	Crewman	Cost/Day or Hour	Total
Crew Supervisor	1	\$518.20/day	\$518.20	10	\$518.20/day	\$5,182.00
Inmate Crew	10	\$2.23 / per inmate/ per day	\$ 22.30	0	\$2.23/ day	\$0
TOTAL			\$540.50			\$5,182.00

Source: NDF project information

Increased Fire Risk from Missions Not Completed Due to a Lack of Inmate Workforce



The loss of the inmate workforce from Ely Conservation Camp increases the risk for fire damage in eastern Nevada. Due to camp closure, NDF was not able to complete 60% of its normal projected fire suppression missions. NDF could not respond to 11 wildfires it normally would have and was not able to provide the workforce to complete other missions, such as fuel reduction, forest and rangeland health, and natural resource

protection. While other agencies responded to the wildfires, no other agencies provided support to complete the other missions in eastern Nevada.

Without completing these missions, some vulnerable land in the state is upgraded to a high-risk area or zone for wildfire. When a wildfire happens in an untreated area the potential loss of life, damages, and costs from a fire will likely be much greater than if treated. Fuel treatments restrict fire movement more than 15% to 20%.⁷



⁷ Calkin et al. "How risk management can prevent future wildfire disasters in the wildland-urban interface." <https://www.pnas.org/content/111/2/746>. Accessed 23 February 2021.

Risk Increased to \$1.7 million from Losing Ely Inmate Workforce

NDF fuel treatment missions reduce risk and help ground forces keep fires smaller and reduce potential spread. NDF will not be able to complete missions, such as fuel reduction, forest and rangeland health, and natural resource protection without the inmate workforce. We estimate \$1.7 million in increased risk due to the lack of the inmate workforce for fiscal year 2021.⁸

Some Inmates Adversely Affected From Closing Ely Conservation Camp

Closing Ely Conservation Camp also affected the inmate workforce. Inmates learn valuable life skills in the fire camps that help them transition back to society, a critical component of NDOC's efforts to reform its prison system and help reduce recidivism. Studies show rehabilitating inmates and providing life skills experience lower recidivism rates by 10%.⁹

Some inmates lost pay for working as firefighters and completing other missions. Conservation camp wages help inmates pay incarceration costs, make deposits into their prison accounts, as well as make victim's restitution payments. Inmates can also positively change their projected release date and shorten their sentence by working in a conservation camp.

Conclusion

With the closure of the Ely Conservation Camp in fiscal year 2020, risk of fire damage increased in eastern Nevada, NDF lost revenues of \$2.2 million and incurred increased personnel costs with a significant decrease in productivity. Without an inmate workforce, NDF is limited in providing cost-efficient wildfire management for the state and has an increased risk of up to \$1.7 million. Moreover, some inmates fail to benefit from valuable life skills to help them transition back to society, earn a wage to make victims' restitution payments, and shorten their sentence.

Coordinating with NDOC, NDF could generate up to \$3.9 million in benefits for the state and provide a cost-efficient workforce to provide for community clean up; fuels and resource management; wildland fire suppression activities; emergency responses; and other community support.

⁸ See Appendix E for calculation.

⁹ Stygar, Ryan A. (2020) "Thinking Outside the Box: A Point-Based System of Reintegration for California's Inmate Firefighters," *California Western Law Review*. Vol. 56: No. 2, Article 6. Accessed 10 March 2021.

Recommendation

2. Coordinate with NDOC to re-establish inmate workforce.

Exhibit III

Summary of Audit Benefits

Recommendation	Benefit
1. Continue successful overtime monitoring.	Help control overtime costs.
2. Coordinate with NDOC to re-establish inmate workforce.	\$3.9 million
Total estimated benefit:	\$3.9 million

Appendix A

Scope and Methodology, Background, Acknowledgements

Scope and Methodology

We began the audit in July 2020. We interviewed management and staff and discussed processes inherent to agencies. We reviewed records for fiscal year 2019 through the second quarter of 2021, applicable Nevada Revised Statutes, and other state and federal guidelines. We surveyed other states and federal agencies, comparing policies and procedures for wildfire management.

The audit included a compilation and detailed analysis of multiple data sets, including policies and procedures, timesheet summary sampling and review, and interviews with staff. We concluded fieldwork in March 2021.

We conducted our audit in conformance with the *International Standards for the Professional Practice of Internal Auditing*.

Background

The Nevada Division of Forestry is one of five divisions under the Department of Conservation and Natural Resources. The division is administered by the State Forester Firewarden who is appointed by and accountable to the Director of the State Department of Conservation and Natural Resources. The division's mission is to provide professional natural resource and wildland fire management services to Nevada citizens and visitors as well as enhance, conserve, and protect forests, rangeland, and watershed values. NDF's legislatively approved budget for fiscal year 2021 was approximately \$36 million with 180 full time equivalent positions and 80 seasonal positions.

Acknowledgments

We express appreciation to the Division of Forestry and Department of Corrections for their cooperation and assistance throughout the audit.

Contributors to this report included:

Warren Lowman
Administrator

Ashwini Prasad, CPA, CIA, CGMA
Executive Branch Auditor

Appendix B

Nevada Division of Forestry Response and Implementation Plan

BRADLEY CROWELL, *Director*
Department of Conservation and Natural Resources

STEVE SISOLAK
Governor

KACEY KC
State Forester/Firewarden



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May 7, 2021

Mr. Warren Lowman
Administrator, Division of Internal Audits
Governor's Finance Office
209 East Musser Street
Carson City, NV 89701

Dear Mr. ~~Lowman~~: *Warren*

As required by NRS 353A.085, I am submitting this written statement of explanation to the Governor's Finance Office Audit Report Number 21-06 for the Nevada Division of Forestry (NDF). I would first like to compliment the professionalism and cooperative nature of your staff member conducting the audit, Ashwini Prasad. Her thorough nature and kind demeanor allowed for productive discussion, thorough review and analyses, and constructive recommendations.

NDF accepts both recommendations included in the report as discussed in our virtual meeting held Monday, April 26, 2021. Over the past three years, NDF has focused on reviewing and updating policies and procedures, grounding itself in its mission and statutory responsibilities, training staff to the highest industry standards, and working collaboratively with all partners in natural resource management and wildland fire response. As a result of this focus, NDF found and addressed issues of overtime pay that were inconsistent with state policy. Following is a written statement of explanation concerning each of the findings contained in the final report.

1. Continue successful overtime monitoring.

As noted in the report, NDF had found inconsistent applications of state policy in overtime pay and corrected this issue for the 2020 fire season, following discussion and concurrence with the Deputy Attorney General's office. All overtime is pre-approved through a Department-wide process, except for emergency response. For employees to receive overtime pay for incident response, all the appropriate documentation is attached to the timesheet prior to approval. NDF human resource staff track and send all NDF overtime every two weeks to NDF and Department of Conservation and Natural Resources leadership. This tracking and review of all NDF overtime will continue.

Implementation has occurred and will continue, with improvements as necessary.

2. Coordinate with NDOC to re-establish inmate workforce.

NDF has established bi-weekly calls with NDOC leadership to improve coordination and communication regarding the ten conservation camps jointly operated by NDF and NDOC, including Silver Springs which was vacated in 2008. NDF provides NDOC with an inmate staffing report showing necessary numbers to fill each NDF crew. NDF prioritizes the camps with highest need when inmate populations are below minimum staffing needs. This coordination and communication has improved the working relationship with NDF and NDOC leadership, and has helped to ensure both agencies are working together to implement agency missions and provide the inmate workforce with skills to reduce recidivism rates in Nevada prisons.

Implementation has occurred and will continue, with improvements as necessary.

Again, NDF appreciates the professionalism and cooperative nature of your staff, and is in agreement with both recommendations provided through this audit. I look forward to continuing this cooperative relationship as we continue to implement these recommendations.

Sincerely,



Kacey KC
State Forester Firewarden

cc: Bradley Crowell, Director DCNR
Dominique Etchegoyhen, Deputy Director DCNR
John Christopherson, Deputy Administrator NDF
Dara Ludi, ASO III NDF
Teri Hack, HR Specialist, NDF

Appendix C

Timetable for Implementing Audit Recommendations

In consultation with the Nevada Division of Forestry (NDF), the Division of Internal Audits categorized the two recommendations contained within this report into one of two separate implementation time frames (i.e., *Category 1* – less than six months; *Category 2* – more than six months). NDF should begin taking steps to implement all recommendations as soon as possible. NDF's target completion dates are incorporated from Appendix B.

Category 1: Recommendations with an anticipated implementation period less than six months.

<u>Recommendation</u>	<u>Time Frame</u>
1. Continue successful overtime monitoring. (page 4)	May 2021

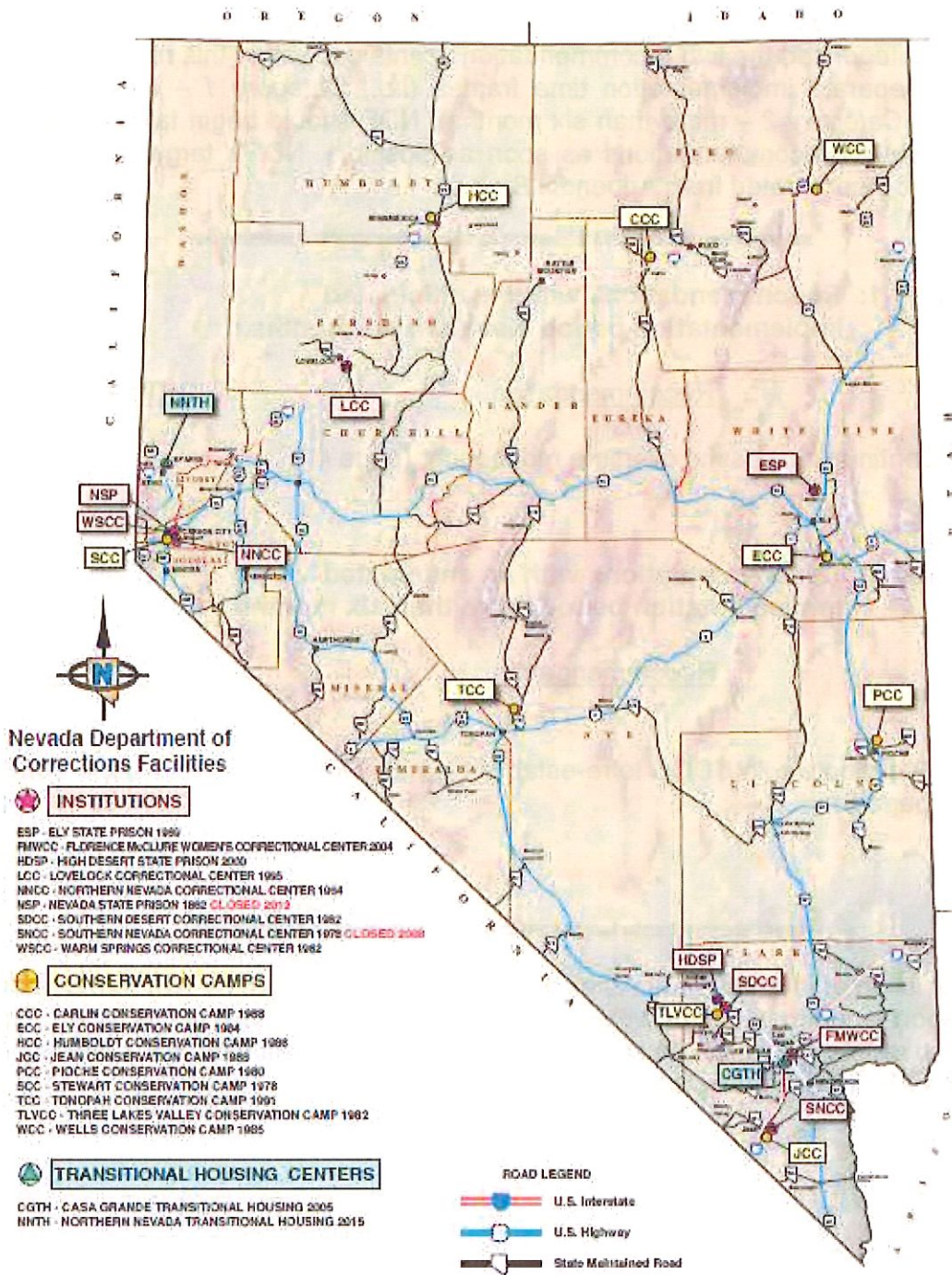
Category 2: Recommendations with an anticipated implementation period more than six months.

<u>Recommendation</u>	<u>Time Frame</u>
2. Coordinate with NDOC to re-establish inmate workforce. (page 8)	June 2022

The Division of Internal Audits shall evaluate the action taken by NDF concerning the report recommendations within six months from the issuance of this report. The Division of Internal Audits must report the results of its evaluation to the Executive Branch Audit Committee, and NDF.

Appendix D

Nevada Department of Corrections Facilities Map



Appendix E

Estimated Cost of Increase Fire Risk

We estimate \$1.7 million in increased risk due to the lack of the inmate workforce for fiscal year 2021. The calculation is as follows:

Average cost of fire = \$92,000

Increased risk without fuel treatment = 20%

Cost of fire without fuel treatment = \$92,000 x 1.2 = \$110,400

Inmate payroll as % of cost of fire = 6%¹⁰

Inmate payroll portion of cost of fire without fuel treatment = \$110,400 x 6% = \$6,624

Inmate payroll portion of cost of fire without fuel treatment using crew supervisors = \$6,624 x 8 = \$52,992

Average cost of fire less inmate payroll = \$110,400 - \$6,624 = \$103,776

Estimated cost of fire with increased fire risk using crew supervisors = \$103,776 + \$52,992 = \$156,768

Number of fires Ely Conservation Camp would have responded to = 11

Estimated cost of increased fire risk without the Ely Conservation Camp workforce = \$156,768 x 11 fires = \$1,724,448 ~ \$1.7 million.

¹⁰ DIA analysis of state accounting records.

