

## ***Nevada's Wildland Fire Cohesive Strategy***

*In September 2015, Nevada held its initial Cohesive Strategy Summit. The purpose of the Summit was to adopt the tenets of the National Wildland Fire Cohesive Strategy and adapt the tenets specifically to Nevada, thus creating a blueprint to address Nevada's wildland fire issues.*

*The following document takes the outcomes of the Summit event and combines higher level statewide issues coupled with a fourth tenet to ensure that Nevada's Cohesive Strategy is successful. This document is intended to act as a "living" document that is never finished and remains flexible to address emerging issues. Each goal has objectives with specific measurable action steps to ensure success.*

### **1. Goal: Create Healthy, Sustainable Forests, Rangelands, Watersheds and Habitat**

#### **1.1. Enhance cooperation and collaboration between agencies and stakeholders to gain efficiencies in land management treatments in Nevada.**

- 1.1.1. Form a statewide body broadly inclusive of governments and stakeholders to address resilient landscapes in Nevada.
- 1.1.2. Define and fund common research and science needs to better inform land management decisions and projects.
- 1.1.3. Use decision support tools to target treatment implementation in years and areas most conducive to restoration success.
- 1.1.4. Identify and recommend parameters and methods for vegetation monitoring statewide allowing for variations in sampling design at the project level.
- 1.1.5. Incorporate research and monitoring results into an adaptive management process updated annually, or as appropriate based on ecological expectations.
- 1.1.6. Establish realistic interagency parameters and targets of success for vegetation treatments and restoration efforts in Nevada specific to regional climatic zones and ecological site potential.
- 1.1.7. Initiate new or update existing agreements to allow for funding transfers between agencies and partners and to allow for the sharing of resources and contractors for project implementation.

#### **1.2. Expand on existing interagency IT infrastructure to archive vegetation and project monitoring data.**

- 1.2.1. Create a shared statewide interagency shared monitoring database.
- 1.2.2. Coordinate and develop a statewide data standard, including metadata.

1.2.3. Combine, retire, or address multiple online database efforts such as the LTDL, Teradata, Great Basin Metadata Server, NRCS's Jornata, DIMA, Landfire NISMS, EDD Maps etc.

**1.3. Develop an online database to store and spatially display fire history, revegetation treatments, and fuel treatments across Nevada that is easily accessible and useable for the public to foster greater integration and collaborative planning on a landscape scale.**

1.3.1. Support NDFs current effort to produce the web portal by providing agency data on an annual basis.

1.3.2. Coordinate and develop a statewide data standard, including metadata.

**1.4. Facilitate interagency project planning and prioritization to gain efficiencies in land management treatment implementation to include shared funding and resources on vegetation projects.**

1.4.1. Identify and prioritize land treatments necessary for increased landscape resilience.

1.4.2. Form regional interagency and stakeholder teams that meet annually to discuss currently active and proposed vegetation treatments.

1.4.3. Task a sub-group to the Nevada Fire Board of Directors to compile the information from the regional teams to provide an annual statewide report on vegetation treatments in the state.

1.4.4. Identify and incorporate successful measures of the Utah Partners in Conservation efforts in Nevada's Partners in Conservation program.

1.4.5. Establish treatment/program budgets over multiple years, to cover both short and long term goals, and across jurisdictional boundaries.

1.4.6. Determine which project logistical needs can be handled by existing resources and assets and which ones need to be developed.

1.4.7. Monitor all treatments for at least 3 to 5 years or until success or failure is determined.

**1.5. Pursue new, update and/or restore existing state, federal or local authorities and laws as they relate to creating, enhancing, or restoring resilient landscapes in Nevada.**

1.5.1. Better define the Nevada Partners in Conservation program to justify new state legislation and funding (look at Utah legislation for guidance) and create organizational structure to implement conservation treatments for resilient landscapes in Nevada.

1.5.2. Reform and restore Categorical exclusion (CX) authority for the federal agencies to expedite project implementation.

1.5.3. Align policy and desired ecological outcomes with funding and long term management goals.

- 1.5.4. Integrate Secretarial Order 3336, the National Seed Strategy, and any other land management guidance to decrease confusion and increase productivity.
- 1.5.5. Continue a statewide, interagency approach to smoke management in Nevada.
- 1.6. Participate in revising federal, state and local regulations as they pertain to smoke management in Nevada to assure compatibility with resilient landscape goals and objectives.**
- 1.7. Promote outreach and in-reach communications/education regarding resilient landscapes in Nevada that provide for consistent messaging across jurisdictional boundaries.**
  - 1.7.1. Support the Living with Fire program in Nevada.
  - 1.7.2. Use interagency outreach materials for varying audiences that incorporate science, research, professional judgement, and traditional knowledge.
- 1.8. Empower communities and local governments to enhance and protect resilient landscapes in Nevada.**
  - 1.8.1. Enable locally led, interagency prioritized planning efforts.
  - 1.8.2. Support wildfire prevention campaigns marketed to all public and private land users in the Great Basin, like Living with Fire.
  - 1.8.3. Support a structure like the Nevada Fire Safe Council to gain community buy in and action throughout Nevada.
- 1.9. Create land management plans and projects that protect and enhance habitat and vegetation diversity and resilience and meet multiple use objectives on federal lands.**
  - 1.9.1. Focus rangeland management plans and projects on keeping herbaceous perennials resilient.
  - 1.9.2. Monitor the effectiveness of management actions for maintaining long term succession and resiliency.
  - 1.9.3. Support implementation of the National Seed Strategy for Rehabilitation and Restoration to promote or enhance restoration with native or adapted plant species integrating successional planning.
- 1.10. Maintain fuel loads at levels consistent with land management objectives and resilience.**
  - 1.10.1. Research, consider, and implement alternative strategies to manage cheatgrass in the Great Basin.
  - 1.10.2. Develop integrated management strategies including chemical, biological, mechanical and targeted grazing control.

- 1.10.3. Develop and support funding strategies for cheatgrass management where funding is currently lacking.
- 1.10.4. Construct strategically located fuel breaks to break up the continuity of fuel and increase the probability of safely suppressing an ignition.
- 1.10.5. Encourage and support a business development environment that fosters the establishment of a biomass utilizing industry that can establish beneficial uses for the fuel being removed.
- 1.10.6. Pursue programmatic NEPA document for fine fuels management based on Disturbance Response Groups (BLM/USFS).
- 1.10.7. Identify and make a listing available of those places where community biomass from fuel reduction and defensible space implementation can be deposited.

**1.11. Support the use of prescribed fire to enhance or improve ecosystems.**

- 1.11.1. Support the Nevada Prescribed Fire Alliance as a mechanism to enhance prescribed fire implementation effectiveness and smoke management.
- 1.11.2. Monitor emerging policy and legal issues that could impact prescribed fire operations.
- 1.11.3. Support and aid in the development of land use and fire management plans that incorporate prescriptions for fire use.

**1.12. Utilize plant materials programs specifically tailored to restoring or increasing resilience of Great Basin ecosystems.**

- 1.12.1. Work collaboratively to implement the National Seed Strategy in Nevada as it relates to resilient landscapes.
- 1.12.2. Seek funding for research that can find, breed, and make available those species that can be used to restore structural functional groups to increase ecosystem resilience, especially in the presence of invasive annual grass such as cheatgrass (*Bromus tectorum*) or red brome (*Bromus rubens*).
- 1.12.3. Support research to enhance or develop pathogenic characteristics of native soil fauna that increase their ability to inhibit the successful establishment and site domination of invasive annuals such as cheatgrass or red brome.
- 1.12.4. Support scientific efforts to determine where assisted succession and other methods could be used to enhance restoration efforts.
- 1.12.5. Use existing science based technologies and knowledge to implement restoration practices in the near future at landscape scales.

1.12.6. Support the completion of UNR/NRCS disturbance response groups and other ecological site-based products such as state and transition modeling that can provide decision support tools for managers implementing restoration with tailored plant materials lists.

1.12.7. Make ecological site descriptions for the Great Basin available with on-line soils surveys.

**1.13. Integrate long term successional planning with emergency stabilization and rehabilitation (ESR) processes to ensure completion during ecologically appropriate and policy dictated timelines.**

1.13.1. Modify policies where they are obstructive in getting restoration achieved.

1.13.2. Pursue a means for government funds to be carried over if climatic and seed availability are not opportune for expenditure, thereby having money available when conditions are more favorable for success.

## **2. Goal: Create Fire Adapted Communities**

**2.1. Expand awareness and understanding of Fire Adapted Communities (FAC) through outreach by the Living With Fire program, as an ongoing established program of University of Nevada Cooperative Extension.**

2.1.1. Secure long-term stable funding to support the staff/infrastructure and program activities for the Living With Fire Program.

2.1.1.1. Conduct a meeting between representatives of the University of Nevada Reno, Bureau of Land Management, Nevada Division of Forestry and USDA Forest Service to discuss formalizing the Living With Fire interagency partnership.

2.1.2. Develop a budget for the expansion of Living With Fire through stable funding for staff and operations to support a more far reaching and extensive marketing program and greater breadth in their educational program.

**2.2. Expand and sustain Nevada Division of Forestry's Nevada Network of Fire Adapted Communities program to facilitate statewide community organization, planning and mitigation of wildfire threats and hazards.**

2.2.1. Secure long-term stable funding to support the staff/infrastructure and program activities for the partnership.

2.2.2. Provide adequate forum for collaboration during Network governance, decision making, policy setting, and implementation.

2.2.2.1. Sustain adequate representation for all major stakeholders on the Advisory Board.

2.2.2.2. Maintain adequate structure through operating policies to guide Network operations and decision making processes.

- 2.2.3. Scale program staffing to meet the statewide needs of communities to become enrolled and engaged.
  - 2.2.3.1. Acquire long-term funding for program coordinator to ensure program stability and administration.
  - 2.2.3.2. Create and sustain community coordinator positions to perform community chapter facilitation, CWPP planning, and community investment (Winnemucca, Elko, Las Vegas and Washoe to start)
  - 2.2.3.3. Provide training opportunities for wildfire mitigation planning to communities.
  - 2.2.3.4. Facilitate connections between communities and resources (tools, assets, funding, etc.) to increase fire adaptation.
- 2.2.4. Continue using the University of Nevada Cooperative Extension's Living With Fire program to deliver outreach education programs and materials for the partnership.
- 2.2.5. Foster and support increasing Network membership as a means to expand the Network skill and knowledge sets to the local level.
  - 2.2.5.1. Market and provide membership recruitment events.
  - 2.2.5.2. Maintain membership databases for all levels of membership.
- 2.2.6. Create and maintain mechanisms for communities and stakeholders to gauge risk levels and FAC implementation status.
  - 2.2.6.1. Use FAC Self-Assessment and FAC Scorecard during chapter membership application process.
  - 2.2.6.2. Develop and use the FAC Scorecard during chapter membership renewal.
  - 2.2.6.3. Create and maintain an online, user-friendly interface for community chapter membership establishment and renewal.
  - 2.2.6.4. Develop and report on and collect information on key metrics that are descriptive of the outcomes desired through the goals, objectives and actions of the Network stakeholders.

**2.3. Sustain and develop partnerships that coordinate and provide common messaging and education to empower communities and stakeholders to mitigate wildfire threats to communities.**

- 2.3.1. Partner with other stakeholders to ensure common support, messaging and promotion of the Network and FAC concepts.
  - 2.3.1.1. Create, collect and market public outreach materials for a well-educated citizenry, staff, and stakeholders.
  - 2.3.1.2. Create and implement a marketing strategy.
  - 2.3.1.3. Sustain the Pulse Newsletter production and distribution for common messaging to the entire Network.

- 2.3.1.4. Ensure resilient landscapes are being managed in conjunction with FAC concepts where they are adjacent to communities.
- 2.3.2. Educate and train stakeholders adequately to perform their roles in developing and supporting FACs.
  - 2.3.2.1. Create and offer public education training/materials to local contractors that implement defensible space projects and produce CWPPs.
  - 2.3.2.2. Host the annual Fire Adapted Communities Conference.
  - 2.3.2.3. Support fire adapted community ambassadors and community chapter leaders.
  - 2.3.2.4. Ensure that NDF Staff and other supporting organizations are well versed in the Network's purpose, function, and their role in helping achieve strategic actions.
  - 2.3.2.5. Provide guidance and support to local fire protection service agencies to assist communities by providing FAC planning, education, and implementation in their jurisdictions.

**2.4. Facilitate community-level participation, investment and actions amongst all stakeholders to mitigate wildfire threats and risks.**

- 2.4.1. Maintain a statewide, publicly available database of all Community Wildfire Protection Plans and mitigation achievements.
  - 2.4.1.1. Review all CWPPs and rate them as to progress since inception; draft formal recommendations for each CWPP for goal achievement
  - 2.4.1.2. Create a "fire adaptation" rating map for the State and include a prioritized list of actions to improve the rating
- 2.4.2. Create and maintain an adequate and functioning wildfire prevention program at NDF.
  - 2.4.2.1. Create and use common messaging for fire prevention with other suppression agencies and partners.
  - 2.4.2.2. Create a network to implement cell phone and other communication methods of emergency broadcast for wildfires occurring in specific vicinities.
- 2.4.3. Provide sources of contractor and agency support to assist FAC implementation.
  - 2.4.3.1. Provide State of Nevada RXQ 3282 Good of the State Contract information to individuals and communities for aid in finding suitable contractors to implement FAC actions.
  - 2.4.3.2. Maintain and provide a list of contractors to individuals and communities that includes those contractors that have completed official Network trainings in their respective service types.

**2.5. Work with stakeholders to create and sustain incentives that enable, encourage and support communities while proactively implementing fire adapted community concepts.**

- 2.5.1. Foster a partnership with Nevada's public utilities, right-of-way managers, and critical industries to address mutual interests while involving public participation.
  - 2.5.1.1. Create partnerships with the State's insurance industry, utility providers, transportation agencies, and others to establish fire adapted communities through education/incentives
- 2.5.2. Encourage and support the adoption and use of local government codes and ordinances for planning/zoning, defensible space, and construction consistent with FAC guidance.
  - 2.5.2.1. Encourage proactivity of local fire services in inspecting and consulting residents on compliance.
  - 2.5.2.2. Work with Nevada State Fire Marshal's office and State Forester to identify and address gaps in local government codes and ordinances related to Wildfire.
- 2.5.3. Perform analysis and research that produces cost-benefits of being a FAC.
  - 2.5.3.1. Work with the FAC Learning Network to research the cost-benefits of implementing FAC concepts within Nevada Communities.
  - 2.5.3.2. Develop a list of peer-reviewed literature that researches the cost-benefits of FAC concepts and make the list available to partners and communities.
- 2.5.4. Encourage and promote opportunities for communities and other stakeholders to raise and use funds to support FAC development.
  - 2.5.4.1. Encourage community HOA's to collect fees from their individual members for funding hazardous fuel reduction projects, fire adapted community education, wildfire prevention planning, and chapter administration/ outreach.
  - 2.5.4.2. Pursue avenues for NDF to collect and redistribute gifts, grants, and donations for funding hazardous fuel reduction projects, fire adapted community education, wildfire prevention planning, and chapter administration/ outreach.
  - 2.5.4.3. Encourage and support novel fundraising opportunities for the network and community chapters.
- 2.5.5. Recognize and reward FAC planning, implementation and education achievements by members and stakeholders.
  - 2.5.5.1. Develop an awards program for community chapters and individual members to be recognized annually at the FAC conference.



- 2.5.6. Design funding prioritization schemes that reward communities with active FAC programs and locally-led achievements.

### **3. Goal: Create a Robust Statewide Wildland Fire / Emergency Response System**

- 3.1. Evaluate current challenges in Nevada wildland fire response that prohibit the most efficient and effective level of response, coordination, and cooperation. Identify source issues and potential solutions which could improve wildland fire response in.**
  - 3.1.1. Study the possibility of creating a multi-agency wildland fire “standards-of-cover” system that creates synergy, uses “closest resource” concept, and eliminates duplication of services.
  - 3.1.2. Create a sub-committee comprised of federal, state and local government fire agencies.
  - 3.1.3. Create data layers for risk assessment and response algorithms
  - 3.1.4. Host preseason fire simulations throughout the state.
  - 3.1.5. Evaluate current CAD run at each center to assure the highest level of efficiency using closest forces.
  - 3.1.6. Establish a NV MAC Group with representation to the GMAC.
  - 3.1.7. Establish operating guidelines for the Nevada MAC.
  - 3.1.8. Establish a process to set a NV preparedness level to inform decisions and mobilization of NVMAC.
  - 3.1.9. Create a final report with recommendations.
- 3.2. Create a plan to preposition multi-agency resources when anticipating augmented resource needs.**
  - 3.2.1. Create a sub-committee comprised of federal, state and local government fire agencies.
  - 3.2.2. Create “trigger points”.
  - 3.2.3. Create a final report with recommendations.
- 3.3. Evaluate options to increase air operations by using diverse federal and state resources.**
  - 3.3.1. Create a sub-committee comprised of federal, state and local government fire agencies.
  - 3.3.2. Fire board establishes expectations for the use of close forces with an emphasis on aircraft.
  - 3.3.3. Create a final report with recommendations.

**3.4. Evaluate the development of statewide drawdown levels and pre-attack plans to include fire use potential.**

3.4.1. Nevada Fire Board charter Operations Group to do this.

**3.5. Evaluate current challenges in Nevada wildland fire dispatching that prohibit the most efficient and effective level of response, coordination, and cooperation. Identify source issues and potential solutions which could improve wildland fire dispatching in Nevada.**

3.5.1. Evaluate dispatch options to maximize overall operations.

3.5.2. Review, Update and enhance interagency dispatch Run cards.

3.5.3. Create a sub-committee comprised of federal, state and local government fire agencies.

3.5.4. Create a final report with recommendations.

3.5.5. Develop/Hire an interagency dispatch liaison/coordinator to help build relationships with partners, facilitate interagency pre and post season meetings, liaison to the National Interagency Dispatch Implementation Project (IDIP), and lead technological advances in Computer Aided Dispatch (CAD), and Advanced Vehicle Location (AVL).

3.5.5.1. Request Nevada Fire Board to develop position and secure funding.

3.5.5.2. Position could shepherd future efficiency efforts, have flexibility to visit and coordinate with federal, state and local dispatch centers.

3.5.5.3. Position could coordinate and facilitate badly needed pre and post season center manager/dispatch supervisor meetings.

3.5.5.4. Position could evaluate past efficiency studies in regard to merging all risk and wildfire centers.

3.5.6. Develop a statewide/universal telephone Wildfire reporting number e.g. #FIRE to compliment current individual dispatch center reporting numbers. This should substitute for current individual reporting numbers on Fire Danger Rating Signs and other prevention media to provide a single statewide reporting number that route to the correct dispatch center.

3.5.6.1. This identified need may have unintended consequences in more populated portions of the state. May confuse the issue with publics who are already trained to call 911 for emergencies which could slow response to wildfire and even all risk events.

3.5.6.2. Create a sub-committee comprised of federal, state and local government fire and all risk agencies to evaluate the best use of this concept.

**3.6. Evaluate wildland fire Cooperative Fire Protection Agreements and Legislation in Nevada. Identify challenges and identify solutions to provide for the most efficient and effective level of response, coordination, and cooperation in response to wildland fires in Nevada.**

3.6.1. Have one Statewide Cooperative Fire Protection Agreement with associated Annual Operating Plans in place that will cover all Federal and Local Government Agencies within Nevada.

3.6.2. Continue to work on the template that is already in place.

**3.7. Review (NRS 533) and make recommendations to enhance the ability of firefighters to obtain private water sources for mitigating emergency incidents.**

3.7.1. Examine best practices of other states (such as Utah).

3.7.2. Find a State legislator with whom Nevada Fire Board can discuss proposal and will sponsor legislation.

3.7.3. NDF can already do this? Chief Friend will research and report back on specifics.

3.7.4. Create a sub-committee to consider current status and evaluate how this type of regulation would be received in NV under the current political and social climate.

**3.8. Evaluate current communications challenges in Nevada in the realm of wildland fire response. Identify solutions to provide for the most efficient and effective level of communication during the response to wildland fires in Nevada.**

3.8.1. Develop/standup a radio infrastructure group/committee with representatives from dispatch, radio technicians, and operations personnel in order to inform the issue. Develop a comprehensive geospatial study to determine future placement/relocation of repeater sites to increase efficiency and eliminate redundancies.

3.8.2. Create a subcommittee under the Nevada Fire Board comprised of Federal, State and Local cooperators.

3.8.3. Use already existing data, effort and infrastructure.

3.8.4. Develop a process for governance and oversight of a statewide system.

3.8.5. Develop and market state wide repeater and/or frequencies for interagency use with cooperators. Examine radio over internet protocol technology.

3.8.6. Assure cross training on partner agency(s) equipment and procedures.

3.8.7. Examine Continuity of Operations to ensure seamless and uninterrupted protocols for evacuations.

3.8.8. Develop and coordinate an emergency “reverse type 911” notification system to alert the public of pre-to-post incidents.