Division Overview

- Pending matters of significance
  - Per Nevada Administrative Code (NAC) 453.615(d), the Nevada Department of Agriculture (NDA) must review requests from outdoor cannabis production applicants to provide verification on whether the location is of adequate isolation distance from an outdoor cannabis or a hemp production location. The NAC is geared at protecting existing production locations from potential cross pollination, which could have significant economic consequences to an existing operation.
  - A workshop was held on 02/16/22 for proposed changes to NAC 552, which would require signage at apiaries that include contact information of the apiary owner. This would allow the NDA to respond to abandoned or diseased apiaries that are reported or found and managed by someone other than the landowner. Feedback received during the workshop included ways for pest control owners to be notified of apiary locations along with a suggested registration that would facilitate contact with beekeepers. The NDA discussed the voluntary registration available for beekeepers to report their hive locations, which is then made available to pest control companies upon request.

- Partnership activities
  - Drought Response Working Group, Farm Service Agency
    - NDA’s Drought Program Specialist presented at the National Integrated Drought Information Systems (NIDIS) and Drought Working Group workshops comprised of diverse stakeholders, including state and federal agencies and agriculture industry participants. Information was shared on successful conservation projects, producer challenges, drought impacts, relief funding challenges and overall program gaps. Resources available to assist with developing water management plans were shared and promoted through the NDA’s quarterly drought newsletter.
  - Early Detection Rapid Response (EDRR) Coordination with U.S. Forest Service, National Parks Service, U.S. Fish and Wildlife, Nevada Division of Forestry, Nevada Conservation Districts, Nevada State Parks, Nevada Department of Transportation, Sagebrush Ecosystem Technical Team, Union Pacific Railroad
    - The annual Nevada EDRR Meeting was held to review Nevada’s EDRR plan and identify next steps for verifying reported class A species (not established in Nevada) and to identify multi-beneficiary projects that would allow for rapid response and treatment of verified infestations. The NDA is coordinating with the City of Sparks, City of Reno, Washoe County Parks and Open Space and the Nevada Department of Wildlife (NDOW) in developing an EDRR project to treat purple loosestrife along the Truckee River corridor.
  - Western Weed Coordinating Committee (WWCC)
    - NDA staff participated in the Western Weed Action Plan subcommittee of the WWCC to review and discuss how individual states are implementing weed control programs. This committee identifies individual state program
barriers and creates a forum for information sharing and collaborative solution planning.

- FDA and New Mexico Food Safety Training
  - The NDA partnered with FDA and the New Mexico Department of Agriculture to host a 4-day workshop on Biological Soil Amendments of Animal Origin. The objective of the training was to teach best practices for managing and applying these soil amendments while considering food safety. 58 participants attended from 12 states.

**Program Updates**

- **Plant Pathology**
  - In Calendar Year 2021, the lab analyzed 1,256 regulatory samples (1,230 were analyzed in 2020), 2,128 survey samples (3,168 in 2020), and 174 general diagnosis samples (155 in 2020). Data generated from these samples are deposited into the USDA’s National Agriculture Pest Information System (NAPIS) and Integrated Plant Health Information System (IPHIS) databases and National Plant Diagnostic Repository.
  - The diseases listed below were detected for the first time in Nevada from foundation plant facilities, nurseries, crops, and commodities. Some of these diseases can limit export eligibility, which are often disease specific depending on the country:
    - Rice grass smut caused by *Ustilago* sp.
    - Squirrel tail grass smut caused by *Ustilago tritici*
    - Vinca Botrytis blight caused by *Botrytis cinerea*
    - Vinca dieback caused by *Phytophthora nicotianae*
    - Onion basal rot caused by *Fusarium oxysporum* f.sp. *cepae*
    - Onion purple blotch caused by *Alternaria* sp.
    - Potato tuber soft rot caused by *Pectobacterium carotovorum*
    - Hemp crown rot caused by *Pythium aphanidermatum* (first time in Northern Nevada)
    - Hemp leaf roll caused by beet curly top virus (widespread in Nevada hemp crops)
  - For the first time, the Plant Pathology Lab used DNA barcoding technology to identify unknown plant materials from the stomach of a sick animal to help determine if the ingested plant species caused illness or death. In this case, it was determined that a deceased sheep had ingested Prickly Russian Thistle.

- **Seed**
  - In 2021, 87 (100 were completed in 2020) individual source identification site inspections were completed. While still relatively new, the number of inspections demonstrates the demand and ongoing development of the wildland seed market. The NDA also issued 1,131 yellow tags (1,463 in 2020), demonstrating seed compliance to NAC 587 for source identified seed lots, accounting for a yearly sum of 58,982.65lbs (67,832lbs in 2020) of wildland collected seed.
• Pesticide Compliance
  o NAC 453D.786 states that a marijuana pesticide residue analysis has failed if an unapproved pesticide is detected in any amount. There has been an increase in pesticide retest requests from marijuana facilities, especially regarding the analytes bifenthrin and piperonyl butoxide. Compliance inspections show that these facilities do not use products that contain these active ingredients. It is possible that these chemical compounds are coming from an exterior pesticide application around the perimeter of facilities or from adjacent buildings. Chemistry laboratory equipment is sensitive enough to detect trace amounts of these analytes.

• Noxious Weeds
  o USDA APHIS awarded $17,809 to Nevada’s Biological Control program where insects and pathogens are used for reducing targeted noxious weeds populations. Ongoing target species include Russian knapweed, leafy spurge and Canada thistle and new target species, including hounds tongue and Eurasian watermilfoil. Next steps include following up with project partners to plan monitoring and release activities and securing the Plant Protection and Quarantine permit to import biocontrol agents into the state.

• Crops
  o The following data reflects hemp samples collected and tested for federal compliance by the NDA, samples that tested above compliance, and approved crop disposals/remediation of non-compliant crops between January 1, 2019 and February 2, 2022.

<table>
<thead>
<tr>
<th>Annual Hemp Sample Analysis Reports</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Total Samples Collected</td>
<td>430</td>
</tr>
<tr>
<td>2019 Non-Compliant Samples</td>
<td>56 or 13.02%</td>
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<tr>
<td>2019 Approved Crop Disposal</td>
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<tr>
<td>2020 Total Samples Collected</td>
<td>305</td>
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<tr>
<td>2020 Non-Compliant Samples</td>
<td>24 or 7.9%</td>
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<tr>
<td>2020 Approved Crop Disposals</td>
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<tr>
<td>2021 Total Samples Collected</td>
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<tr>
<td>2021 Non-Compliant Samples</td>
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<tr>
<td>2021 Approved Crop Disposals</td>
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</tr>
<tr>
<td>2021 Approved Crop Remediation</td>
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</table>

  o In January, one NDA staff member from the Shipping Point and Marketplace team traveled to Idaho to receive training from USDA on Potato shipping point inspections. The training was successful and the department now has an inspector trained to perform Potato shipping point inspections. This will create opportunity for inspections at a highly reduced rate due to the proximity and lower rate of state staff versus USDA inspectors traveling from California. Further training is
underway to expand commodity market-place inspection services in April/May of 2022.

- Shipping point certificates for onion statistics are reported from August 1, 2021 to January 31, 2022 and have increased by 7% with 569 certificates being processed for FY22 versus FY21, where 530 certificates were processed.

- Entomology
  - Two parks in Southern Nevada were determined to have Red Imported Fire Ants and have been quarantined. Meetings are planned with city park supervisors to go over the quarantine requirements and treatment schedule. Treatments will begin when appropriate ground temperatures are reached in the Spring.

- Nursery
  - Trace forward tracking was conducted after notifications were received from the Michigan Department of Agriculture that a Michigan nursery shipped live plants to Nevada that were non-compliant with the Japanese Beetle certification/harmonization plan, which serves to ensure the shipments and/or nursery are being inspected and potentially treated. Homeowners that purchased the nursery stock have been notified and the NDA Entomology team will be setting Japanese beetle traps at these locations to identify whether any introduction has occurred.