Kick-off Overview

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Introductions

Sanborn/University of Vermont Team:

• Jason Caldwell – Sanborn, Senior VP and Account Manager for DRCOG
• Steve Ashbee – Sanborn, Project Manager
• Jared Martin – Sanborn, Geomatics Director
• Lauren DeMars – Sanborn, GIS Analyst
• Jarlath O'Neil-Dunne – University of Vermont, Director, Spatial Analysis Laboratory
• Nina Safavi – University of Vermont, Project Manager
Background

This regional land cover project follows the successful Pilot Study conducted by DRCOG, the Babbitt Center for Land and Water Policy, the Conservation Innovation Center and regional partners in 2019. The Sanborn/University of Vermont team was subsequently selected by the regional partners to develop a regional land cover dataset in 2020 and brought under contract in the Spring of 2021.
Project Area

6,032 Square Mile Area

- Replicates the 2020 DRAPP project
Pilot Area

Pilot Area 1

- A preliminary Pilot Area was chosen just south of Chatfield Lake for the purpose of initiating the Interpretation Key.
- Additional Pilot Area(s) may be established to represent different general land cover characteristics.
Source Data

• 3-inch, 6-inch, and 12-inch resolution, 4-band, leaf-off orthoimagery for 6,000 square miles of the region collected as part of the 2020 Denver Regional Aerial Photography Project (DRAPP)

• Leaf-on imagery procured by Sanborn from a source such as Maxar/DigitalGlobe WorldView, VDP, HxIP, or Nearmap

• QL1 and QL2 lidar data collected in the summer of 2020 for 5,000 square miles of the region, including the classified point cloud, raster DEM, and raster intensity, and
Land Cover Mapping Standards
Human-constructed objects made of impervious materials that are greater than approximately 8 feet in height. Houses, malls, and electrical towers are examples of structures. Estimated MMU = 180 square feet.
Human-constructed surfaces through which water cannot penetrate, and that are below approximately 2 meters in height. This includes asphalt, concrete, gravel, pavement, treated lumber (e.g. docks and decks), and dirt roads etc. Estimated MMU = 81 square feet, minimum 6 feet wide for linear features.
Human-constructed surfaces through which water cannot penetrate, and that are below approximately 2 meters in height. This includes asphalt, concrete, gravel, pavement, treated lumber (e.g. docks and decks), and dirt roads etc. Estimated MMU = 81 square feet, minimum 6 feet wide for linear features.
All areas of open water, generally with less than 25% cover of vegetation/land cover. This includes ponds, lakes, rivers, natural tidal pools in wetland areas, and boats that are not attached to docks. Estimated MMU = 900 square feet.
Large open semi-arid areas composed of perennial grasses and herbaceous vegetation. These lands are often used for ranching and grazing but are not managed beyond these activities. This class also includes unmanaged natural ground cover that is less than a 2 feet tall, such as wetland areas. Estimated MMU = 270 square feet.
Areas dominated by shrubs; less than 8 feet tall with shrub canopy typically greater than 20% of total vegetation. This class includes true shrubs, young trees in an early successional stage or trees stunted from environmental conditions. Estimated MMU = 900 square feet.
Deciduous and evergreen woody vegetation of either natural succession or human planting that is over approximately 8 feet in height. Stand-alone individuals, discrete clumps, and interlocking individuals are included. Includes individual large shrubs. Estimated MMU = 54 square feet.
Turf grass and areas of land that are actively managed and watered that do not fall in the cropland class. Examples of turf: lawns, cemeteries, golf courses, sports fields. Estimated MMU = 81 square feet.
Areas void of vegetation consisting of natural earthen material regardless of how it has been cleared. This includes beaches, mud flats, bedrock, xeriscaped lawns, and bare ground in construction sites (hard-packed paths/roads in construction sites would be better suited for the impervious class). Estimated MMU = 270 square feet.
Large fields generally found in non-urban areas used for the production of various annual crops. These lands can be in active or inactive use but must show visual signs of recent usage such as tilled fields or tire tracks. Estimated MMU = 87,120 square feet (2-acres).
# Preliminary Schedule - Overview

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<thead>
<tr>
<th>Task</th>
<th>Item/Deliverable</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1</td>
<td>Project Initiation</td>
<td>18-Jun-2021</td>
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<tr>
<td>2</td>
<td>Pilot Area Delivery</td>
<td>30-Jul-2021</td>
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<td>3</td>
<td>Final Delivery Area 1a</td>
<td>30-Nov-2021</td>
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<td>4</td>
<td>Final Delivery Area 1</td>
<td>31-Dec-2021</td>
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<td>5</td>
<td>Final Delivery Area 2</td>
<td>31-Jan-2022</td>
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<td>6</td>
<td>Final Delivery Area 3</td>
<td>28-Feb-2022</td>
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<td>7</td>
<td>Deliver Metadata and Accuracy Assessment</td>
<td>28-Feb-2022</td>
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Deliverables

• Spatial reference:
  – State Plane Colorado Central Zone (NOAA 0502_)
  – NAD83 (2011)
  – US Survey Feet

• Data in ESRI compatible raster and polygon formats
• Methodology documentation
• FGDC compliant metadata
• Accuracy assessment
Next Steps

June-July 2021

• Review develop Interpretation Key as needed
• Expand Pilot Area(s) as needed
• Develop and QC final Pilot Areas
• Pilot Area(s) delivered by end of July