

## Ag Advisory Group Meeting Notes August 7, 2019

- In may gave initial results and at this pt initial scope complete
- Presentoion on three parts:
- There are 2 new pieces done by Duncan and team muliareat analysis, crops in each parcel field.
- How much water by each crop in estimates
- Land suitability analysis
  - Went over the results since May 2019 last meeting
  - Incorporated the update on the land use parcels available for AG development
  - In summary, larger potential ag area available for Ag development
  - Showed course screening criteria of how changed since May 2019, last meeting
    - Perimeter Area Ratio was new criteria
    - Parcel fields- areas of potential ag development
  - Asked if ownership was looked into for the odd shape parcels, possibly discuss the areas that are odd shape
- Slide 11:
  - Christmas trees, the elevation could go lower but depends on species; roads and infrastructure influence where they are grown.
  - 0 elevations should be updated with the correct elevations; El Dorado County not on see level.
  - Apple range is reasonable
  - Soils and water are more limiting than elevation for these crops
- Slide 12: Proximity to existing roads and
- Limit for existing ag fields, measure perimeter in feet and area in acres. Exisitn ag described how the Ag fields potential where ag would occur
  - Did look at Google earth to

### Multifavirat analysos

- Analysis of water and pitenial pcrops are
- Analysis combines the ecomics and the possible ophysical locations to place potential crops in the County
- Slide 18: Looked at model specification and data
  - Did we loss potential crop in annuals? => will be included but not shown in the presentation
  - WRDMP demand unit- types that would grow depending on water purveyor service area
  - ?At this piunt the land capacinility indix and soils have already been considered.
  - Oak tree ordinance factored in? This mayve huge impact. It was discussed when talked with Planning should have no impact. You can still develop for Ag in those areas. Mitigation 0 areas cannot develop and have been accounted for already.
  - Major road is a state highway definition, like 49 and 50. Not county roads. Question was that maybe dominant secondary roads should be considered, example county raods along Apple Hill. Highway 116 is another once that should be considered. Would need to see if highway 193 is considered. A map can be presented to agree on roads
- Slide 19: Some crops grown better some slopes, higher elevations can limit where you can plant on some slopes, since some areas can be too shaded. The higher the elevation the more important to look at the aspect
- Cost to establish water delivry or land development was not considered into the model for what crops are ideal in the County

- Slide 20; pie chart figures need to update the color, excluded color of the crop removed should not be included
- Slide 21, darker is higher probability and low is lower probability for the heat maps to show where developments are likely to occur. Land closer to road has large influence. Wineries are not in database, but did include WRDMP demand units.
- Slide 21: Plymoth to Pleasant valley should be included for the vineyards; but if too many roads decrease predictability in the model. Need to discuss further. E16 is important since wineries are there; can be deferred because of current industry there.
- Slide 22: E16 could be included to have retail outlet there for apples and other crops. This adjustment needs to be made
- Slide 23: E16 would need to be included.
- Demand unit def- way of grouping parcels grow graphically influenced by the water purveyor service area, just group but does not affect use. These are set the planning dept. should not affect analysis
- Slide 24: Would change if the low elevation req is removed
- Pastures not interesting can be placed anywhere, included in analysis but not presented.
- The highest likelihood crop would be applied to each parcel.
- Suggest that there be a range of possibilities, conditions could change, at the end need to assign a crop to parcel
- Tool can be used for planning in the future
- The other crops will not affect water footprint; to be refined based on the results of major crops
- Crop et and applied water
  - Discussed only major crops
  - Slide 29: 2017 used since good crop data available
  - Slide 31: this is total ET for time period April to Sep
  - Slide 33 shows range of water use, total ET, low vineyard values could if new plant with low, model based info easily which use most water
  - Slide 41: ET of applied water shown only for WR application, in future use avg or high water needs?
  - Soil water storage model determines ET of each crop in IDC model
  - Rooting depths are 3-4 depending on the crop, the depth not big impact of there is variability in crops; affects irrigation schedule but not that much water in irrigations season water applied.
  - Trying to get rep irrigation conditions, with representative rooting depth
  - Are these values for AW ok, seem to high depend irrigation method too
  - Group maybe able to provide water meter data to compare the data measured to the results that are obtained.
  - UC- does the model need to be accurate? Being credible is good, and although high estimate then still good.
  - Challenge is getting enough data to represent avg water use
  - Age of vine and location of crop can affect AW
  - Big picture scientific vs actual? Systematic well thought out analysis that can be supported. Did compare DWR estimate avg with what was obtained here, and they are close.
  - Defensible approach is key; based on actual data and not anecdotal;
  - Apples:
  - Last column important to look at slide 44

- Comments from groups: some few requirements are needed but all is good since process is clear. Uncomfortable: on stress curves July and Aug harvest so lines would go down for Apples. Crop coefficients based on real info, explained why less water; stress was comment on vineyards
- Post harvest water needs to be included in the AW, post harvest;
- Sensitivity of using 2017 data for Kc values, we have enough evidence to support 2017 so why used
- There will be a final Ag Advisory group meeting
- Members should try to show up in wksp