

April 21, 2020
Regular Meeting
Item # 7c

Community Development

Additional Documents:
Public Comment

Mono County Board of Supervisors,

I have been having discussions with staff about the proposal for temporary Cannabis Delivery which is on the agenda for tomorrow's Board of Supervisors meeting. Staff advised that I send an e-mail covering my thoughts ahead of time and copy Scheereen for the record.

Here are my thoughts on cannabis delivery --

Firstly, cannabis delivery is not necessary in Mono County. This is not filling a real need and there is no reason our local dispensaries can't follow safe practices and sell product to go. With all of the challenges we are all facing during this global pandemic, we should be focusing on real needs of those that live and work in Mono County and prioritizing accordingly.

In the long term, cannabis delivery in Mono County is not good for economic development. Presumably, when we allow delivery in Mono County then that means that we are allowing delivery from outside the unincorporated county. I understand there are several lawsuits in play right now that may change things, but my assumption is that by disallowing delivery within Mono County then we are not allowing anyone to deliver (either within or outside the county).

California is the world's 5th largest economy. It is reasonable to assume that it is just a matter of time before a large, corporate retailer located somewhere outside of the county (i.e. down South) offers delivery here. This already happens with alcohol and there are numerous apps and delivery services that come up here. (I know – I'm a customer and use the Drizly app here in June Lake) Allowing cannabis delivery in Mono County will have a direct economic impact on small businesses here when we should be creating an environment for them to flourish.

This will also have a direct impact on Mono County tax revenue as any delivery service from outside the county will not be paying the Mono County Cannabis tax.

There are also a whole slew of other issues. There will be issues with delivery to campgrounds that are on federal land. There will also be issues with products that may be currently illegal through Mono County ordinance – how on Earth would the County enforce compliance with delivery services located outside of the county? Especially given the fact that the county will be receiving less revenue as a result of this decision. You will have effectively lost any and all ability to regulate and control the local market (i.e. what products are or are not allowed).

It should be noted that even in the short term, the proposal here is that retailers will follow state regulations. The state regulations are quite stringent and, among other things, involve specialized delivery vehicles equipped with security cages, custom GPS tracking devices, etc. It doesn't make sense for a local retailer to endure the expenses to remain compliant for a short period of time. What happens to these vehicles when this temporary decision goes away? We are creating an expectation that this temporary decision may lead to a permanent allowance for delivery in Mono County.

From a personal standpoint, High Sierra has been significantly effected by this global pandemic. We are still operating in a safe environment yet our sales don't even cover the cost of employees on most days. We remain open simply as a service to the local community and to help maintain the few jobs we did create. Allowing cannabis delivery will have a material impact on our sales as we can expect that our competition will start delivering here. In order to remain competitive from a business standpoint,

this essentially forces us to offer delivery which will require all the expenses necessary to remain compliant at the state level. This really isn't a road I'd like to go down. Quite frankly, I'm surprised that the other Cannabis retailer in unincorporated Mono County doesn't realize that they would likely see an immediate impact on their sales if other businesses were delivering in their area. Cannabis delivery even in the short term will hurt local retail businesses, not help them.

I humbly ask that the Board of Supervisors decline to approve this measure and focus on much higher priorities.

Thanks for your time and stay safe!

Cheers,

John M. DeCoster

High Sierra
2555 HWY 158
June Lake, CA 93529

Cell: 310.924.9478

www.highsierrajunelake.com

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Item # 7e

Community Development

Additional Documents:
Updated Proposal

Suppa Family Farm, Conway Ranch Aquaculture property, Arable Agriculture.

I am encouraging the consideration of an agriculture use lease for the 75-acre Conway aquaculture property. There are multiple aspects at Conway that lend space supporting a systems approach model. A farm would provide local communities direct access to a variety of produce grown in a historically productive landscape and supporting regional development. Provided is a brief synopsis of land characteristics and possible implementation of a biologically diverse farm operation.

Soil samples provide that Conway sandy loam and DeChambeau gravelly complex comprise the 75 acres, respectively. The majority being Conway sandy loam, which provides an average 3000lbs/ac of forage, and is prime agriculture land if irrigated and drained. Replanting of native grass seed could enhance productivity without need of irrigation. The remaining acreage of DeChambeau gravelly complex is ideal arable land and of statewide importance for agriculture.

System thinking presents an agroecology model that uses natural combinations and extensions of the farm functions with its surrounding elements- usually in the form of silviopasture and agroforestry. For example, certain production fruit and nut tree plantings around a pond will reduce evaporation, create a wind break for reduction of evapotranspiration, and finally give a wood substrate for mushroom inoculation; this in addition of these trees respective crops and give fodder to animals. There is also an emphasis on creating a more closed loop, with few external inputs. The aquaculture pond could be used for rearing of fish will provide effluent for nutrient application. Using the process of nitrification, this water is filtered through various mediums to switch nitrites to nitrates. This offers a more contained nutrient system for established crops. A comprehensive nutrient management plan will have to be created to balance the application. In contrast to the fisheries model where fingerlings are raised for stocking local lakes for sportsman, these fish would be isolated to the one area and be directly provided to market. Certain crops will need higher amounts than others; however, organized guilds of trees and crops with different but symbiotic function utilize their required amount of nutrient need. Though alternative in relation to industrial agriculture, these indigenous uses of the landscape have the highest yield efficiencies and lowest energy input output coefficients.

Further reducing water use, planting using swales along contour absorbs more water into soil organic matter with slower release. Contour trenching in combination with the established aquaculture infrastructure gives ideal prospect for key line irrigation, using the established flood and drain system. Eventually, drip irrigation can be used to provide direct watering with minimal loss. However, key line offers ideal absorption of soil organic matter, lending to a slow release and a successful 90% retention. Crops will also be inoculated with mushroom mycelium to provide further filtration and another crop. Slow release is essential in the desert climate, where evapotranspiration lends to lost moisture. Allowing a plant to continue absorption through roots while its stomata are closed is essential for efficiency.

Agriculture guilds also provide needed water demands of the variety of crops, meaning less moisture lost to evapotranspiration. For instance, forage and orchards use

2000 AF/yr. or 3cfs, while vegetable crops are 10 AF/yr. or 1.4cfs on a 1000 acre parcel. Therefore, each acre of forage and orchard is using .00276 cfs per acre, while vegetable production is using .000138 cfs per acre. Combining the use of forage, trees, and grazing animals provides efficiency within the system and less water demand. Different traits and needs provide a niche for each at optimal biological efficiency.

Along the line of following local traits, managing cattle and chickens, bees and mushrooms utilize the natural habitat provided on Conway soil. Forage needs and habitat of wild populations will be considered in the grazing management plan. Electric fencing will give high mobility for ease of access in rotational grazing and predator protection, allowing versatility in management.

The DeChambeau soil location provides an opportunity to offer a more traditional agriculture methodology on available arable land. Preferably, a no till approach will retain soil and mycelium structure, avoiding erosion by wind or precipitation. Polycultures will be maintained to exploit niches, and considering 4-5 year rotation of crops will be on a 1-2 acre scale. This gives an approachable model that relies on bio-intensity for sustainable yields. The use of this land would provide produce for sale to a Community Supported Agriculture program or restaurants, grocery stores, and farmer's markets supported by the extensive tourism industry. Expanded past production, there is also opportunity for interactive workshops or agritourism events that offer a perspective on high desert agriculture. Allowing an alternative agriculture model will provide multiple facets for generating revenue.

More than taking advantage of tourism establishments or increasing food security of Mono County, the availability of a small-scale agriculture operation encourages local employment and vocational training. Programs could be used that provide educational credits during the school year, while internships could be provided to establish marketable skills, employment, and retain a presence of motivated peoples hoping to cultivate Eastern Sierra agricultural heritage.

Taking into consideration some of the other components of Conway Ranch would be the currently defunct raceways from the aquaculture property. These areas have the most disturbance, so opportunistic species ie cheat grass, bouncing bette, Russian thistle, Canadian thistle etc. are going to establish if these areas remain neglected. During public outreach for priorities, the removal of invasive species was the most important aspect. Replacing these R1 species with native perennials will ensure long-term reestablishment. Native flower production would also be incorporated to offer both fresh cut flower and pollinator species habitat.

Further, the ability to slow succession within the bowl meadow from grassland to shrub could be complimented by the improvement of established ditch cut to model beaver dam activity. The parallel from Wilson Creek, where an older beaver dam has flooded rabbit brush and established both grass and wood perennials, providing a more diverse habitat structure. For further synopsis please see the attached field measurements:

**SITE DESCRIPTION AND COMMENTS: CONWAY RANCH – BOWL MEADOW
OCT. 9, 2015**

DRAINAGE DITCH INTO WILSON CREEK



Straight ditch draining excess water from meadow flowing north, potential for headcutting at top/beginning of ditch – good place to reinforce with rock or fill in entirely with rock and sediment, let the meadow reclaim this ditch. Some headcutting off of drainage ditch as well.



Ditch holding water – stagnant. Would be good to fill this ditch in with rock/sediment, be sure not to lose sediment out of meadow. West side of ditch significantly drier than East side. Flowing water coming into lower part of drainage ditch from aquaculture and/or spring. Getting wider below confluence, ditch/stream trying to create more sinuosity but much more entrenched (bankfull to floodplain elevation = 0.65m). This could be a good area to split the channel.



Entrenched Zone

Gradient drop, deep water zone and some lateral scouring (0.57m) – check dams done well could also be helpful here (water to bankfull elevation = 0.4m), water not getting out except during big flood events. Extremely fine sediment on banks – will tend to erode more easily. Some early seral stage willows on banks, good. Milfoil growing thick in channel. Bank instability on left could continue to erode back – maybe add some jute cloth along with willow plugs to stabilize bank. (At least three species of willow present)



CONFLUENCE OF DRAINAGE DITCH AND WILSON CREEK

Wilson Creek = 0.77m water depth. Channel has incised over time, water might not reach floodplain except during large flood event. Banks on stream are showing legacy impacts of grazing (i.e. eroding and incised with inset floodplain). Man-made beaver dams could be added to capture sediment and reconnect channel with historic floodplain. Drainage ditch will not become much more entrenched because it is at roughly the same elevation as Wilson Creek, but has the potential to headcut south up the meadow if not reinforced with large rocks to prevent further erosion.

WILSON CREEK

Average height of instability ~1.75m above bankfull elevation. Old beaver dam, this would be good to reinforce/build up – drive in some stakes add some large wood.



Large, newer beaver dam upstream, really raises the water table and is doing excellent things for the meadow and connectivity. Cattails and willows present here, good. There are areas where willows have been drowned out by beaver dams bringing up the water table.



Meadow coming back and may push rabbit brush/sagebrush back but is not known how much water is required to drown out those species.



ACROSS MEADOW

Burned willows and good regrowth, fire may not have been long ago (2-5yrs.). Ditch near old fish pond in an "L" shape needs to be filled in. It would be good to carefully map all the irrigation ditches and list their purposes. Also look to see if there is any imagery of pre and post beaver dam. Get depth profiles in all waterways, including dry waterways.

BELL DIVERSION

Change in substrate, much larger than in meadow streams. Could be used for yearlong dependable flow and for development of good riparian habitat. A lot of willow along this diversion ditch.



This report was compiled by Sabra Purdy, Erin Smith, Jake Suppa, and Gavin Suppa.

Sabra Purdy

209-743-8363

sabrapurdy@gmail.com

Erin Smith

916-847-1044

e.l.smith000@gmail.com

The potential of the Conway Ranch area is limited by the political will that defines this space. Having a niche market based on local foods would provide a retained product. The theme of extracting resources for the short-term gain needs to model a more sustainable element. Having a pilot program approach, with the 75 acres separate from the more traditional operations, could offer a working test model for implementation throughout the county in regards to alternative methodology and crops that may support an entry into the agriculture field.

Proposal: Implementation of the conservation easement baseline of two (2) acres of arable agriculture within the seventy-five (75) acre aquaculture area, including bowl meadow. In particular, the disturbed areas of the now defunct fishponds. The Eastern Sierra, in practicality, meets the criteria of both a food desert and food swamp, despite not meeting the definition, due to median income levels. However, the scarcity of local foods should encourage the possibility of providing a venue. Further, providing local foods, utilizing local resources that are not extracted from the area, offers a public benefit. In particular, the availability of affordable, wholesome foods and the ability to participate in the success of such a venue-providing both health and opportunity in new job markets.

CEQA: As a continuation of historical agriculture functions, and recognized within the conservation easement baseline, a 15325 exemption is appropriate.

Methodology:

Arable Agriculture: The agriculture practice will be based on regenerative practices, whereby productivity does not interfere with ecosystem improvements. This 'market garden' style improves yields with intense intercropping and high rotation. Located within disturbed areas, establishing permanent beds with 'super-soil' creates an option of no-till, maintain the soil structure and sequestering carbon. Being adjacent to the raceway, a solar pump to gravity fed storage tank will be used for drip irrigation. The water consumption of a mixed-vegetable farm is approximately .000138 c.f.s. per acre. In addition, with support and a successful operation, additional perennial plantings can be introduced in the 'chiampas' style, small fisheries can be enabled in the raceways to provide aquaponic greens, and floating mushroom bags can be integrated to filter water before returning to Wilson creek.

Permanent beds will be oriented into blocks and rows. Each block is specific to a species family, while each row is an individual plant within the species block ie brassica as both broccoli and kale in a block, with each in an individual row. Based on topography and spacing, a block may be 25x25, with each row aspect at 4' on center, comprising a 36" bed and a 12" walk path.

Remay covers will be utilized to prevent crop damage, with the topography of the ponds reducing wind erosion.

Animal Agriculture: The bowl meadow complex, at 75 acres, with a forage productivity of 3000lbs/ac/yr. also provides an option to have grazing. Following a succession model, and not participating in the meat industry, would mean having (2) cattle for biodynamic manure production, as well as egg chickens to rotate and

house in a temporary chicken tractor. Fencing would be electric, drop wire, allowing ease of rotation and securing the premise from intrusion into the riparian area.

Ecosystem Regeneration: The bowl meadow complex is currently overgrown and constitutes a fire hazard. In addition to the thatch grass meadow, many invasive species have been introduced to disturbed areas. As an operator, there will be a diligent effort to remove invasive and supplant with native shrubs and grasses. Also, the antiquated return ditch from the raceway can be updated to emulate natural systems, such as dam checks. Strategic placement of checks on the return ditch will offer more infiltration to the meadow complex, increase grass productivity and reducing succession. Thereby, the habitat is improved with increased willow and native grass populations that support many species of the area, such as the mule deer herd and bi-state sage-grouse population.

Business Structure: Suppa Family Farm is a sole-proprietorship and will begin operations as such. With a lease agreement, the ability to apply for loans is possible; in particular, the Farm Service Agency via USDA provides microloans. Initially, direct sales will occur to local grocers and restaurants, with the hope of creating community support to initiate a CSA share-box, with seasonal offerings. Gleaning will be encouraged for volunteerism and hopes of 501c3 incorporation will offer the ability to apply for grants that support local agriculture. All volunteers will be subject to a waiver, and the well-being of volunteers the responsibility of the operator, Suppa Family Farm.

Timeline:

2015-2020: Approach Mono County with concept and continue outreach...

2020-2021: Establish permanent beds and irrigation infrastructure; cover-crop and fall over-winter produce ie garlic. Control of invasive species.

2021-2022: Year 1 of production, following a mixed-veggie, market-garden, supplying to local grocers and restaurants. Mowing of bowl meadow thatch/outreach BLM participation control burn?

2022-2023: Year 2 of production, establishment of a CSA share and incorporation into a 501c3. Expansion of meadow through return ditch checks mimicking beaver dams.

2023-2024: Year 3 of production, integration of livestock.

Diagram:

Outlines indicate disturbed areas, and a threshold of 2ac. will be maintained. Solar pumps and storage tanks will be strategically placed along raceway, with reduction of visibility as a main facet of concern.



Example plant offerings/rotations:

Rotation	Planning Season	Crop	% of Spacing	Plots	Sq Ft	Yield/ Sq Ft	Unit
1	previous fall	garlic	50	4.0	888	2.6	count
		garlic scapes	50	4.0	888	2.6	count
	early spring	onions, green	50	4.0	888	1.3	bunch
	late spring	onions, green	50	4.0	888	1.3	bunch
	late July	leeks, baby	100	8.0	1,776	1.5	count
2	spring	carrots	83	6.6	1,474	0.8	pound
		celery	5	0.4	89	0.4	plant
		parsnips	5	0.4	89	0.5	pound
		cilantro	5	0.4	89	11.5	bunch
		parsley	1	0.1	18	6.2	bunch
		dill	1	0.1	18	2.6	plant
3	spring	beets	50	4.0	888	0.7	pound
		chard	50	4.0	888	0.9	plant
	late summer	spinach	100	8.0	1,776	0.3	pound
4	late spring	squash, summer	40	3.2	710	0.4	pound
		squash, winter	20	1.6	355	0.4	pound
5	early spring	peas, sugar snap	30	2.4	533	0.5	pound
		peas, snow	30	2.4	533	0.5	pound
	mid-summer	peas, sugar snap	30	2.4	533	0.5	pound
		peas, snow	30	2.4	533	0.5	pound
	June	beans, fresh shell	8	0.6	133	0.2	pound
		beans, dry colored	8	0.6	133	0.1	pound
	beans, green	25	2.0	444	0.2	pound	
7	early spring	salad mix	50	4.0	888	2.6	bag
		lettuce, head	50	4.0	888	0.6	count
8	early spring	radishes	20	1.6	355	1.3	bunch
	early spring	broccoli	40	3.2	710	0.4	pound
	early spring	greens, Asian	40	3.2	710	0.9	plant
	summer	kale	20	1.6	355	1.3	pound

WSU Market Garden. Carol Miles, Gale Sterrett, WSU Mount Vernon Mykel Taylor, Douglas Young, WSU Pullman. 2010.

Production Calculation

Vegetable	Days to maturity*	Yield/ 100-foot bed**	Notes
Anugula	35	200 bunches	
Asian greens	60	300 units	
Basil	60	150 units/week	Assume 1 bunch (0.4 oz.) per plant every 2 weeks once production is underway.
Bean	55	65 lb./week	Assume 130 lb. total over 2 weeks of good production.
Beet	60	160 bunches	
Broccoli	75	120 heads	
Bulk spinach	40	75 pounds	Assume 35 lb. at the first harvest and 40 lb. between the second and third harvests.
Cabbage	80	150 units	
Carrot	55	180 bunches	
Cauliflower	75	130 heads	Allow many more days in the garden for certain cultivars.
Celery root	140	300 units	
Eggplant	100	65 units/week	Assume about 1 fruit per plant per week once production is underway.
Fennel	80	400 units	
Garlic	N/A	600 units	
Green onion	75	350 units	
Greenhouse cucumber	50	115 units/week	Assume 1.75 fruits per plant per week.
Ground cherry	110	Undetermined	2 beds are enough for our annual needs.
Kohlrabi	60	420 units	Allow many more days in the garden for certain cultivars.
Lettuce	50	250 units	
Melon	80	100 units or less	Assume 1.25 fruits per plant.
Onion	120	400 lb.	
Pepper	120	120 units/week	Assume about 1 fruit per plant per week once production is underway.
Radish	30	300 bunches	
Snow/snap peas	55	25 lb./week or less	Assume 75 lb. total spread out over 3 weeks of good production.
Summer squash	50	100 units/week	Assume 2 fruits per plant per week.
Swiss chard and kale	60	150 units/week	Assume 1 bunch per 2 plants every 2 weeks.
Tomato	120	150 lb./week	Assume 3 fruits per plant per week once production is underway.
Turnip	40	200 bunches	
Summer leek	120	175 units	These are sold in bunches of 3 or 4.

The Market Garden. Jean Martin Fortier, New Society Publishers. 2014.

Thanks for your consideration,

Jake Suppa
suppafungi@gmail.com
 760.914.0003