## 4/30/2022

Additional arguments from Fenton, property owner of 325 Stafford Road opposing the Organic Humboldt, LLC request for a commercial cannabis special permit for 445 Stafford Road, Scotia, Record # PLN-2020-16475, APN 205-231-029, public hearing before the Humboldt Planning Commission scheduled for Thursday, May 5, 2022 @ 6:00 PDT

Dear Humboldt County Planning Commission:

We are Jay R. and Karen L. Fenton, property owners of 325 Stafford Road, APN 205-231-021. We are requesting that you reject PLN-2020-16475, APN205-231-029 in its entirety. **The sketchy, incomplete proposal from the applicant threatens our parcel's access to adequate and clean water source downstream from the subject parcel.** 

For our comments below please refer to the document dated 4/21/2022 submitted by Supervising Planner Cliff Johnston to the Zoning Administrator. We have concerns about the adequacy of the applicant's proposal and subsequent enforcement of staff recommendations listed in Attachment 1, pages 16-25.

A. Bogus "existing water catchment system" [Attachment 1: # B.8,18, 20,35,36,37,38,40] As far as we can determine, staff has not scrutinized or addressed the applicant's claimed "existing water catchment system." With our complaint we are enclosing photos of the existing system that we photographed on 4/24/2022

The one-story structure shown in the photo stands just about 3 feet from our fence installed after our property lines were surveyed and registered. The two-story structure is only about 15 feet away from our fence line. These two structures are claimed as part of an existing water catchment system. Since the catchment system is an integral part of the planned cultivation, they stand in violation of the 30' setback from the property line. Additionally, they are located less than the 600' required distance from our residence.

The "existing water catchment system" was hastily erected in February- March of this year and immediately fell apart. [See photos] An attempted repair of this "system" also fell apart. Lightweight materials and duct tape connections do not constitute a proper water catchment system.

Originally, the applicant proposed to use a 3200 SF surface area (page 3, Water Resources). However, the 4/24/2022 site plan on page 14 of the report submitted on 4/21/22 shows one of two existing structures removed to allow for an "SRA hammerhead turnaround." Only the smaller 780 SF structure would remain to be used to collect rainwater by gravity to proposed ten 5000-gallon tanks.

Based upon Scotia's average annual rainfall of 56", a 780 SF roof would only yield possibly 3643 gallons of water per year. The proposed catchment system lacks the surface area needed to generate the claimed 10,000 gallons per year projection.

The tanks currently on site are just 2500-gallon each. A 5000-gallon tank system would require a certified engineered design. A proposed 5000-gallon tank would stand taller than the current 2500-gallon tank and its inlet would be higher than the rain gutter. The applicant does not mention use of a transfer pump or intermediate collection tank. As shown, the proposed collection system will not work.

## B. The entire 445 Stafford parcel is within the 100-year flood plain.

The highest point of land, where the two roofed structures are now located, is in the SW corner of that parcel. Both structures currently sit 4' below the base flood elevation. The applicant did not submit a site topography map or an engineered plan for securing or elevating the tanks. Nor does the planner specify disqualification and removal of the "existing rainwater catchment system." [See Attachment 1, A.1 and B.8]

The planner accepts the applicant's proposal to remove the water tanks from the floodplain from October 15<sup>th</sup> to April 16th of each year [Notice on Pages 9 & 17 in the planner's report that the dates were erroneously reversed.] The proposal does not reconcile how tanks removal offsite during the rainiest months would be able to collect and store rainwater from the site roof catchment system.

## C. The special permit would allow cultivation that exceeds the capacity of site dry farming with a proposed catchment system, resulting in the need to use the site well as the primary irrigation source.

A special permit granted to 445 Stafford would allow a maximum 57,060 SF cultivation area, equal to 17,118 plants (300 plants per 1000SF). Nowhere does the planning report recommend limiting plant cultivation to match ground water diversion. The planner did not require any calculations but accepted the applicant's proposal at face value. On 4/18/2022 the planner reported that the applicant revised his estimated annual water usage to 20,000 gallons from 10,000, supplied primarily through dry farming supplemented by water stored with a rain catchment system.

It is challenging to estimate water demand to cultivate cannabis due to varied growing conditions. We provide here three different estimates – the applicant's versus a comprehensive researched compilation of data from the 2016-17 growing season versus our estimate based upon our dry farming experience.

- The applicant's original estimated annual water use of 10,000 gallons, excludes the amount of surface ground water taken up in the dry farming phase [Page 36]. He re-estimated the amount to 20,000 gallons per 1.3 acres (57,060 SF) cultivated with two crops in the ground over a period of 2 x 10 weeks.
- Research data from the science article, "Water storage and irrigation practice for cannabis drive seasonal patterns of water extraction and use in Northern California" by C. Dillis, et al, Journal of Environmental Management (June 2020). The authors analyzed water extraction and use from over 600 Northern California cannabis farms, including Humboldt County. They estimated that the median overall water use, both outdoor and mixed-light operations, totaled over 340,000 gallons annually per acre, of which 65,000 gallons per acre were used in August. When sized to

1.3 acres, the total demand would become 442,000 gallons annually. In their summary, the authors concluded that most farms lack sufficient storage capacity to offset seasonal demand and thus must rely on other sources, the most common of which are groundwater wells.

• Fenton's estimate, assuming dry farming of proposed two crops

Since 1998 we have farmed at 325 Stafford Road, which is adjacent to the subject parcel. During that period, we have cultivated a vegetable garden by drip irrigating all the plants except the tomatoes, which are dry farmed. As such, we have an appreciation for the local soil conditions, growing requirements, and irrigation needs.

We estimated water usage based upon the applicant's "Table Describing Detailed Schedule of Activities During the Season" [Pages 32 -34]. Here is our estimated water use, assuming the proposed dry farming technique.

The applicant indicates two dry farmed crops per year. The proposed 57,060 SF growth area would provide for 17,118 plants, given a density of 300 plants per 1000 SF. The second crop will require irrigating more than the first since the surface ground water will have been depleted by the first crop.

Planting #1: 17,118 plants X 5 gallons each dry farmed = 85,590 gallons

Planting #2: 17,118 plants X 3.5 gallons irrigated during each of 10 weeks= 599,130 gallons

Combined water requirements for crops #1 & 2 =684,720 gallons

**Fenton's Conclusion**: 20,000 gallons demand versus 442,000 gallons versus 685,000 gallons is pure fantasy. The applicant lacks adequate water from dry farming with the present rain catchment design. He will attempt to use the site well. Drilled in 1980, this well has never been analyzed or filed with the county (page 28).

There are better climatic environments than Stafford Road to grow cannabis in Humboldt County. The applicant chose this location because of the Eel River aquifer. This application is basically smoke and mirrors and should be denied on the basics of gross misrepresentation. We ask that the Planning Commission deny this permit.

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