

**Appeal No. 19-097**

**Appellant:** Joshua Klipp

**Respondent:** Dept. of Public Works-Bureau of Urban Forestry

**Date Filed:** October 17, 2019

**Hearing Date:** November 6, 2019

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**I. Introduction**

Appellant, Joshua Klipp, respectfully appeals the Department of Public Works' decision approving the removal of forty-eight (48) street trees in the Mission along 24th Street between Mission Street and Potrero Avenue.

**II. Argument Summary**

- The City's accelerated tree removal efforts in the face of a Climate Emergency and irreversible climate change are wholly irresponsible, especially in light of the fact that last year San Francisco's already paltry urban canopy **lost 2,507 trees**.
- The City's accelerated tree removal efforts are also irresponsible in light of the fact that the City has barely, if at all, budgeted sufficient funds to replace it's trees 1:1, let alone make up for the environmental losses of large trees that are replaced with tiny saplings.
- The tree removal along 24th Street will result in massive losses to that neighborhood - a neighborhood which has already suffered through waves of gentrification and displacement - and result in everything from the loss of carbon sequestration along traffic choked streets, cleaner air, filtration of massive amounts of stormwater, and an already diminishing ecology.

- The City's replacement strategy for this removal fail to compensate the Mission - and the City - for these losses.

### III. Factual Background

At 13.7%, San Francisco has the worst urban canopy of any major city in the United States.<sup>1</sup> In 2014, San Francisco released a 20 year plan to add 50,000 trees to our City's streets and public rights of way by 2034, or an average of 2,500 trees per year.<sup>2</sup> According to San Francisco Urban Forestry Council Reports<sup>3</sup>:

- In 2015, San Francisco netted only 1,810 additional trees - 1,033 short of 2,500
- In 2016, San Francisco netted only 302 additional trees - 2,198 short of 2,500
- In 2017, San Francisco netted only 111 additional trees - 2,398 short of 2,500
- In 2018, San Francisco netted **ONE** single tree - 2,499 short of 2,500.
- And in the last fiscal year, San Francisco **LOST 2,507 trees**.<sup>4</sup>

**Since the Urban Forest Plan was released in 2014, rather than gain 12,500 trees, San Francisco has LOST 276.**

Earlier this year, the Board of Supervisors passed a resolution declaring that San Francisco is in a Climate Emergency. This resolution effectively required San Francisco's Department of the Environment to develop a revised climate action strategy listing out actions we must take to avoid reaching a point of no return with respect to climate change. On July 22, 2019, the Director for the Department of the Environment,

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<sup>1</sup> See San Francisco 2014 Urban Forest Plan ([https://default.sfplanning.org/plans-and-programs/planning-for-the-city/urban-forest-plan/Urban\\_Forest\\_Plan\\_Final-092314WEB.pdf](https://default.sfplanning.org/plans-and-programs/planning-for-the-city/urban-forest-plan/Urban_Forest_Plan_Final-092314WEB.pdf)).

<sup>2</sup> *Id.*

<sup>3</sup> See <https://sfenvironment.org/article/urban-forestry/annual-urban-forest-reports>

<sup>4</sup> [https://drive.google.com/file/d/1aOWzyJZgdY2f\\_cTsohRcL6B1Efws4x2g/view?usp=sharing](https://drive.google.com/file/d/1aOWzyJZgdY2f_cTsohRcL6B1Efws4x2g/view?usp=sharing)

Deborah Rafael, and members of hers and various City Departments, presented the new strategy and recommendations to the Board of Supervisors' Land Use and Transportation Committee.<sup>5</sup>

Notably, Director Rafael stressed near the beginning of her presentation the massive importance of planting trees.<sup>6</sup> She made this point because, even with all of San Francisco's progressive environmental initiatives, we are still failing to sequester enough CO2, and trees are one of the few things on this planet that perform this human life-sustaining function. The Department of the Environment's Wendy Goodfriend went on to say that the City has, at most, ten years to activate and fully engage all possible carbon sequestration and mitigation efforts before climate change impacts are irreversible.<sup>7</sup>

Unfortunately, in this fiscal year, the City failed to budget enough money to plant enough carbon sequestering trees to even begin to meet these demonstrated sequestration needs. In fact, according to a presentation by the Bureau of Urban Forestry's Superintendent Carla Short to the Urban Forestry Council on August 27th, 2019, the City has not even budgeted enough to replace the trees it is removing 1:1.<sup>8</sup>

Now, in the context of these facts, the City continues to take down massive trees in swaths all across the city: 48 along this short stretch of 24th Street in the Mission, 60 along 16th Street for a new bus lane, 39 in Hayes Valley, 7 along Washington Square Park in North Beach (after SFRPD already took out over a dozen trees in that single

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<sup>5</sup> See [http://sanfrancisco.granicus.com/MediaPlayer.php?view\\_id=10&clip\\_id=33695&meta\\_id=744803](http://sanfrancisco.granicus.com/MediaPlayer.php?view_id=10&clip_id=33695&meta_id=744803)

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> [http://sanfrancisco.granicus.com/ViewPublisher.php?view\\_id=129](http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=129)

park alone in the last year), 13 on one block of Mission Street in SOMA, and dozens more all over San Francisco - all these in the last 6 months alone. Notably, this does not include the 600-700 trees that will be removed as part of the new Market Street plan, the 300 trees coming out for 2 development projects in Laurel Heights, trees removed all over the City for attrition and development (including trees illegally removed by developers which go unprosecuted), SFRPD Capital Projects (or lack of maintenance), or the thousands of trees reaching their end of life in our parks and the Presidio.

With regard to the trees at issue in the appealed permit, an informal i-tree Design report indicates that these trees on this short stretch of 24th Street alone have already:<sup>9</sup>

- Sequestered nearly a quarter of a million lbs of CO<sub>2</sub>;
- Intercepted nearly 1.5 million gallons of stormwater runoff; and
- conserved 45,543.4 Kilowatt-hours of electricity.

In this past year alone, it is estimated that these trees have:

- Intercepted nearly 90,000 gallons of stormwater
- Sequestered 10,000lbs of CO<sub>2</sub>; and
- Conserved nearly 3,000 Kilowatt-hours of electricity.

#### **IV. Argument**

A. The City is failing to protect its current and future residents from the impacts of climate change.

The City's Board of Supervisors has already acknowledged that we are in a climate crisis, and the Department of the Environment has specifically called out the

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<sup>9</sup> See Exhibit 1, hereto.

need to plant more trees in order to sequester more CO2. Despite this, the City has failed to budget enough money to fund the even a minimal number of trees for adequate sequestration, failed to meet even its most basic 2014 Urban Forest Plan goals, and is now hemorrhaging the very - slow growing, in some instances irreplaceable - natural asset and ally that it needs for the sustenance of human life.

B. The City's "replacement strategy" is inadequate, and fails to take into consideration the impact this removal will have on the neighborhood.

The City's replacement strategy is, at best, 1:1, with a hope and a prayer that these trees even survive to establishment in a rugged and harsh urban environment. This replacement may have been deemed sufficient in the days we naively thought we weren't injuring the planet, but now we know better, and even our City's top officials have acknowledged this. If this removal and replacement is allowed to go forward, the Mission will lose all of the environmental benefits listed above, and not come close to recuperating them until we are well beyond the planet's point of no return.

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## **V. Conclusion**

For the foregoing reasons, Appellant respectfully objects to the implementation of this permit and removal. Appellant respectfully requests that the City: (1) stagger removal and only then when based only on a tree-by-tree determination that a tree is a hazard and safety risk to humans; (2) implement a biomass replanting strategy (e.g. plant an inch of trunk for every trunk removed); and (3) implement a strategy to plant and water all empty basins in the Mission District within the next three years.

Respectfully submitted,

Signature: 

Date: 10/16/2019

# **EXHIBIT 1**



## Total Projected Benefits (2019-2034) - Over the next 15 years, based on forecasted tree growth, i-Tree Design projects total benefits worth \$24,495:

- \$5,935 of stormwater runoff savings by intercepting 1,483,647 gallons of rainfall
- \$3,311 of air quality improvement savings by absorbing and intercepting pollutants such as ozone, sulfur dioxide, nitrogen dioxide, and particulate matter; reducing energy production needs; and lowering air temperature
- \$3,337 of savings by reducing 143,536 lbs. of atmospheric carbon dioxide through CO<sub>2</sub> sequestration and decreased energy production needs and emissions
- \$5,004 of summer energy savings by direct shading and air cooling effect through evapotranspiration
- \$6,908 of winter energy savings by slowing down winds and reducing home heat loss

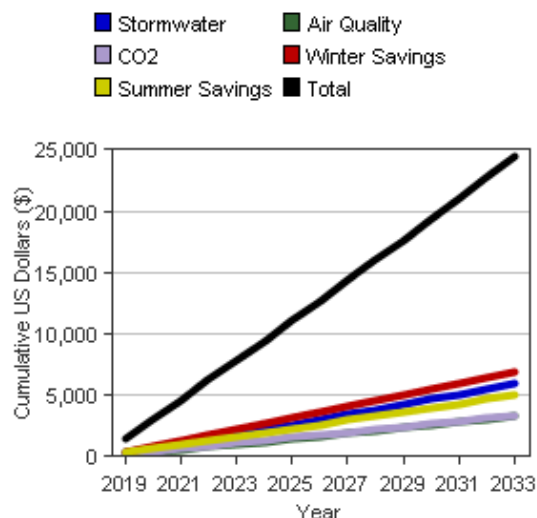


Figure 1. Tree benefit forecast for 15 years

- Stormwater
- Air Quality
- Winter Savings
- CO<sub>2</sub>
- Summer Savings

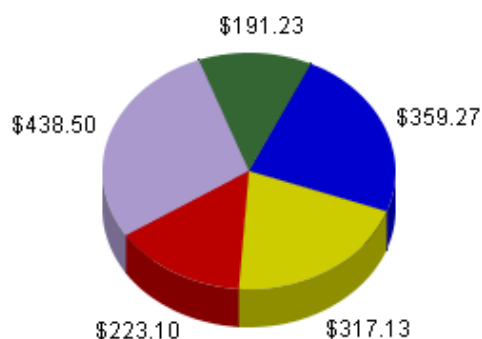


Figure 2. Annual tree benefits for 2019

## Current Year - For 2019, i-Tree Design estimates annual tree benefits of \$1,529.23:

- \$359.27 of stormwater runoff savings by intercepting 89,787 gallons of rainfall
- \$191.23 of air quality improvement savings
- \$223.10 of carbon dioxide reduction savings
- \$317.13 of summer energy savings
- \$438.50 of winter energy savings

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**Future Year** - In the year 2034, based on forecasted tree growth, i-Tree Design projects annual benefits of \$1,727.87:

- \$433.73 of stormwater runoff savings by intercepting 108,427 gallons of rainfall
- \$252.10 of air quality improvement savings
- \$219.33 of carbon dioxide reduction savings
- \$341.19 of summer energy savings
- \$481.52 of winter energy savings

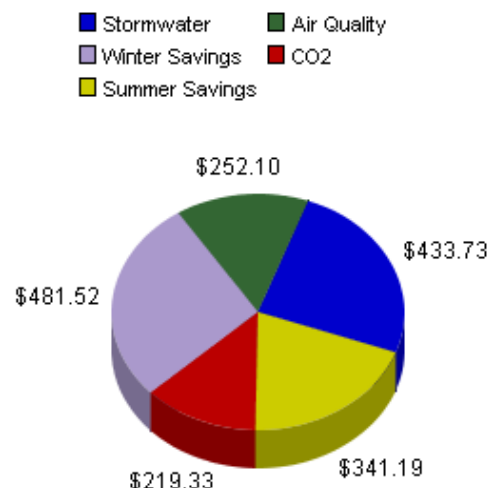


Figure 3. Annual tree benefits for the year 2034

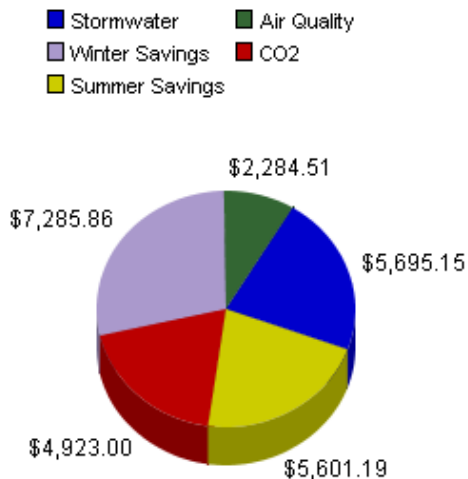


Figure 4. Total benefits to date

**Total Benefits to Date** - Over the life of the tree(s) so far, i-Tree Design calculates total benefits worth \$25,790:

- \$5,695 of stormwater runoff savings by intercepting 1,423,728 gallons of rainfall
- \$2,285 of air quality improvement savings
- \$4,923 of carbon dioxide reduction savings
- \$5,601 of summer energy savings
- \$7,286 of winter energy savings

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### Individual Tree Benefits

Tree	DBH (in)	Condition	Location to Structure	Benefits			
				Current Year (2019)	Future Year (2034)	Projected Total (2019-2034)	Total to Date
1. Indian laurel fig	20	Fair	1: East (28 ft) 2: East (89 ft)	\$24.92	\$33.35	\$450	\$403
2. Indian laurel fig	25	Fair	1: East (24 ft) 2: East (91 ft)	\$34.70	\$36.49	\$533	\$689
3. Indian laurel fig	22	Fair	1: East (58 ft) 2: East (58 ft)	\$40.82	\$43.43	\$632	\$699
4. Indian laurel fig	20	Fair	1: East (55 ft) 2: East (60 ft)	\$30.29	\$38.53	\$529	\$528
5. Indian laurel fig	22	Fair	1: East (56 ft) 2: East (59 ft)	\$37.17	\$39.78	\$577	\$645
6. Indian laurel fig	25	Fair	1: East (72 ft) 2: East (38 ft)	\$34.70	\$36.49	\$533	\$690
7. Indian laurel fig	20	Fair	1: East (44 ft) 2: Northeast (65 ft)	\$30.29	\$38.53	\$529	\$528
8. Indian laurel fig	24	Fair	1: East (36 ft) 2: Northeast (72 ft)	\$33.80	\$35.81	\$522	\$625
9. Indian laurel fig	23	Fair	1: East (74 ft) 2: Northeast (33 ft)	\$42.85	\$45.15	\$660	\$791
10. Indian laurel fig	22	Fair	1: East (73 ft) 2: Northeast (33 ft)	\$41.94	\$44.55	\$649	\$711
11. Indian laurel fig	26	Fair	1: East (69 ft) 2: Northeast (37 ft)	\$45.50	\$47.13	\$694	\$1,041
12. Indian laurel fig	22	Fair	1: East (32 ft) 2: Northeast (77 ft)	\$31.99	\$34.60	\$499	\$501
13. Indian laurel fig	20	Fair	1: East (32 ft) 2: Northeast (75 ft)	\$24.92	\$33.35	\$450	\$403
14. Indian laurel fig	18	Fair	1: East (30 ft) 2: Northeast (76 ft)	\$22.39	\$31.99	\$393	\$315

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15. Indian laurel fig	23	Fair	1: East (39 ft) 2: Northeast (66 ft)	\$32.90	\$35.20	\$511	\$563
16. Indian laurel fig	22	Fair	1: East (36 ft) 2: North (69 ft)	\$31.99	\$34.60	\$499	\$501
17. Indian laurel fig	22	Fair	1: East (58 ft) 2: North (46 ft)	\$46.87	\$49.48	\$722	\$775
18. Indian laurel fig	23	Fair	1: East (35 ft) 2: Northwest (67 ft)	\$32.90	\$35.20	\$511	\$563
19. Indian laurel fig	22	Fair	1: Southeast (35 ft) 2: Northwest (66 ft)	\$30.81	\$33.42	\$482	\$422
20. Indian laurel fig	22	Fair	1: Southeast (78 ft) 2: Northwest (25 ft)	\$43.29	\$45.90	\$669	\$718
21. Indian laurel fig	22	Fair	1: Southeast (83 ft) 2: Northwest (18 ft)	\$43.17	\$45.78	\$667	\$712
22. Indian laurel fig	23	Fair	1: Southeast (41 ft) 2: Northwest (59 ft)	\$39.73	\$42.03	\$613	\$657
23. Indian laurel fig	25	Fair	1: Southeast (81 ft) 2: West (18 ft)	\$44.23	\$46.02	\$676	\$847
24. Indian laurel fig	22	Fair	1: South (75 ft) 2: West (22 ft)	\$40.11	\$42.72	\$621	\$614
25. Indian laurel fig	25	Fair	1: South (47 ft) 2: West (50 ft)	\$40.46	\$42.25	\$620	\$804
26. Indian laurel fig	23	Fair	1: South (87 ft) 2: West (9 ft)	\$42.43	\$44.73	\$654	\$684

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27. Indian laurel fig	22	Fair	1: Southwest (45 ft) 2: West (50 ft)	\$44.51	\$47.12	\$687	\$640
28. Indian laurel fig	22	Fair	1: Southwest (86 ft) 2: West (9 ft)	\$41.52	\$44.13	\$642	\$605
29. Indian laurel fig	20	Fair	1: West (30 ft) 2: West (61 ft)	\$32.47	\$41.47	\$571	\$487
30. Indian laurel fig	21	Fair	1: Southwest (83 ft) 2: West (7 ft)	\$35.58	\$43.50	\$625	\$535
31. Indian laurel fig	22	Fair	1: West (71 ft) 2: West (29 ft)	\$40.11	\$42.72	\$621	\$614
32. Indian laurel fig	22	Fair	1: West (73 ft) 2: West (87 ft)	\$33.52	\$36.13	\$522	\$589
33. Indian laurel fig	22	Fair	1: West (69 ft) 2: West (149 ft)	\$33.52	\$36.13	\$522	\$582
34. Indian laurel fig	15	Fair	1: West (70 ft) 2: West (216 ft)	\$15.07	\$30.83	\$382	\$159
35. Indian laurel fig	24	Fair	1: West (77 ft) 2: West (277 ft)	\$25.62	\$37.34	\$419	\$503
36. Indian laurel fig	25	Fair	1: West (74 ft) 2: West (327 ft)	\$26.52	\$28.31	\$411	\$551
37. Indian laurel fig	23	Fair	1: West (70 ft) 2: West (376 ft)	\$24.72	\$26.97	\$388	\$456
38. Indian laurel fig	23	Fair	1: West (72 ft) 2: West (431 ft)	\$24.72	\$27.02	\$388	\$456
39. Indian laurel fig	21	Fair	1: West (40 ft) 2: West (378 ft)	\$25.04	\$32.86	\$466	\$415
40. Indian laurel fig	15	Fair	1: West (36 ft) 2: West (262 ft)	\$16.19	\$23.25	\$296	\$160
41. Indian laurel fig	20	Fair	1: West (79 ft) 3: East (258 ft)	\$21.61	\$34.88	\$391	\$327
42. Indian laurel fig	23	Fair	1: West (83 ft) 3: East (313 ft)	\$24.72	\$27.02	\$388	\$456

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43. Indian laurel fig	20	Fair	1: West (81 ft) 3: East (200 ft)	\$30.83	\$34.88	\$496	\$418
44. Indian laurel fig	21	Fair	1: West (87 ft) 3: East (132 ft)	\$32.48	\$35.50	\$510	\$523
45. Indian laurel fig	21	Fair	1: West (135 ft) 3: East (275 ft)	\$22.81	\$25.79	\$365	\$362
46. Indian laurel fig	21	Fair	1: West (149 ft) 3: Southeast (64 ft)	\$32.48	\$35.50	\$510	\$520
<b>Total</b>				<b>\$1,529.23</b>	<b>\$1,727.87</b>	<b>\$24,495</b>	<b>\$25,790</b>

Note: "Location to Structure" lists location information for two closest structures, with structure ID numbers shown.

DBH: "diameter at breast height" is the standard measurement of tree trunk width at 4.5 feet (1.5 meters) above the ground.

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