

No. SCPW-22-0000078

Electronically Filed  
Supreme Court  
SCPW-22-0000078

IN THE SUPREME COURT OF THE STATE OF HAWAII

11-MAR-2022

11:58 AM

Dkt. 53 DEC

WILLIAM M. HICKS; RALPH BOYEA;  
MADGE SCHAEFER; MICHAELA  
IKEUCHI; KIMEONA KANE; MAKI  
MORINOUE; ROBERTA MAYOR;  
DEBORAH WARD; JENNIFER  
LIENHART-TSUJI; LARRY S. VERAY; and  
PHILIP BARNES,

ORIGINAL PROCEEDING

DECLARATION OF ROYCE A. JONES

Petitioners,

vs.

THE 2021 HAWAII REAPPORTIONMENT  
COMMISSION AND ITS MEMBERS; THE  
STATE OF HAWAII OFFICE OF  
ELECTIONS; and SCOTT NAGO, in his  
official capacity as Chief Elections Officer,  
State of Hawai'i,

Respondents.

DECLARATION OF ROYCE A. JONES

I, ROYCE A. JONES, declare that:

1. I am a resident of the City and County of Honolulu, State of Hawai'i, and am a GIS consultant for the 2021 Reapportionment Commission.
2. I am a certified Geographic Information Systems Professional (GISP) and have more than 40 years of experience related to geography and computer mapping, including twenty years as a senior GIS analyst.
3. My experience includes having been the Hawaii Pacific Regional Manager for Esri from 1999 to 2016. In that capacity, I provided training and professional GIS services to the

State of Hawaii, including the Office of Elections. During this time frame, I provided support to the 2001 and 2011 Reapportionment Commissions.

4. Upon retiring from ESRI, I continued to provide services to the Office of Elections through my company, GDSI Hawaii, that I had previously operated from 1990 to 1999 before joining Esri in 1999. My present support of the 2021 Reapportionment Commission is done in conjunction with technical support from Esri.

5. In terms of education, I earned an M.Ed. in education technology in 1987 from the University of Hawaii and a B.S. in geology from Stanford University in 1980. Additionally, I was a founding member of the Hawaii Geographic Coordinating Council (HIGICC)) and served as its president from 1999 to 2003 and from 2011 to 2012.

6. As it relates to my support of the 2001, 2011, and 2021 Reapportionment Commissions, I either directly or with the assistance of Esri provided the following professional services: (1) Prepare data (spatial and tabular) the Commission will use to develop redistricting plans based on prescribed redistricting rules; (2) Provide the Commission with tools and training to accomplish the redistricting tasks within the prescribed rules and timeline; (3) Provide support in the creation of the permanent resident population base; (4) Develop data products (e.g. reports and maps) the Commission needs to document redistricting plans; (5) Provide an online environment to publish redistricting plans for review and comment by the public; (6) Provide technical support to the Commission as they present plans during the official review periods; and (7) Provide support activities related to reprecincting and the creation of new election maps.

7. In performing my duties, it was my understanding that the 2021 Reapportionment Commission had three basic tasks: (1) redraw the U.S. Congressional Districts of the State of Hawaii based on the population count from the last U.S. Census; (2) reapportion and redistrict

the Senate and House of Representative districts of the State of Hawaii Legislature based on the permanent resident population that involved the extraction of non-permanent residents from the U.S. Census population count; and (3) designate twelve of the twenty-five State Senate district seats that would have two-year terms in the election immediately following the reapportionment.

8. These tasks were to be conducted within a constitutional and statutory framework that outlined the process that was to be followed. This included the development of proposed plans by the Reapportionment Commission, a subsequent public hearing process, and an eventual adoption of final reapportionment plans.

9. To support the development of plans, Esri provided its online redistricting software Hawaii Redistricting Online that contained data and tools for redistricting. I was responsible for administering the software, adding Hawaii specific reference layers like school districts, ahupuaa and neighborhood boards. I was also responsible for creating lessons on how to use the software. The Hawaii Redistricting Online software was available for Commission use and use by the public at <https://redistricting.hawaii.esriemcs.com/redistricting/index.html>.

10. Using Hawaii Redistricting Online software, the public had access to the same data and tools as the Commission. There were tools for assigning census blocks to congressional and legislative districts, tools for monitoring district deviation from the average ideal (target) district population, and many reporting tools. There were also tools to check plan integrity, checking overall plan deviation (less than 1% for Congressional plans, less than 10% for State Senate and State House), checking that all census blocks are assigned to a district and checking that all blocks assigned to a district are contiguous. All proposed and final plans of the Commission as well as all publicly submitted plans passed all these integrity checks.

11. As it relates to documenting the work of the Reapportionment Commission, a reapportionment webpage was established that the public could access through a link at [elections.hawaii.gov](https://elections.hawaii.gov) or directly at <https://elections.hawaii.gov/about-us/boards-and-commissions/reapportionment/>.

12. This webpage included a virtual library of information concerning the work of the Reapportionment Commission. This included recordings of all meeting and public hearings, the meeting materials for each meeting, testimony, and the lessons I created on how to utilize the online redistricting tool to submit plans. It also included maps (PDF and interactive) that I created for all the proposed and final Commission plans as well as the publicly submitted plans.

13. I also created maps and informational slides for the majority of the staff presentations to the Reapportionment Commission that are in the meeting materials for each meeting.

14. In regard to the technical committee's work, I provided GIS technical support by being available to answer questions on the use of the Hawaii Redistricting Online software. I was also available if they had any questions about the publicly submitted plans.

15. It is important to note that given the nature of the guiding criteria in Article IV, Section 6 and HRS § 25-2 concerning redistricting, I did not interject myself into the technical committee's decisions regarding where to draw district lines for state legislative or congressional districts. I answered questions if asked but did not participate in the decision making.

16. Regarding the criteria on "split districts" or crossing districts between the House, Senate, and Congressional districts, I don't know how the technical committee weighed this criteria, but for this Court, I did go back and looked at the Plans adopted by past Commissions – 1991, 2001, 2011 – along with the plan adopted by the 2021 Commission, to see how they

compare on this criteria. I looked statewide at how many State Senate seats were split by Congressional lines, how many State House seats were split by Congressional lines, and how many State House seats were split by State Senate lines. Here are the numbers:

	2021	2011	2001	1991
	=====	=====	=====	=====
State Senate split by Congressional	5	5	3	3
State House split by Congressional	4	6	5	2
State House split by State Senate	33	30	31	38

It is remarkable how similar they are.

Sources for historical districts - State of Hawaii GIS:

Congressional	1991 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-1991/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-1991/about</a>
	2001 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-2001/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-2001/about</a>
	2011 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-2011/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::us-congressional-districts-2011/about</a>
State Senate	1991 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-1991/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-1991/about</a>
	2001 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-2001/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-2001/about</a>
	2011 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-2012/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-senate-districts-2012/about</a>
State House	1991 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-1991/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-1991/about</a>
	2001 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-2001/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-2001/about</a>
	2011 <a href="https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-2012/about">https://geoportal.hawaii.gov/datasets/HiStateGIS::hawaii-state-house-districts-2012/about</a>

17. The number of “State House split by State Senate” in 2021 (33) differs from the Petitioners’ number (35) due to small non-substantive changes made during precincting. These small changes were allowed by the Commission as voted on at their January 28, 2022 meeting:

[2:22 PM]

Commissioner Ono made a motion to allow the Reapportionment Project Office to make technical, non-substantive changes to the adopted Legislative and Congressional Reapportionment and Redistricting Plan providing that a change affect fewer than 200 people and the basic island unit deviations do not exceed plus or minus 4.9% which was seconded by Commissioner Rathbun and approved unanimously by the Commission.

These small changes are made as the first step in precincting, also referred to as reprecincting. New precinct maps need to be made that reflect the new Congressional, State Senate, State House and County Council districts. Each unique combination of these new

districts defines a ballot type that each voter in that precinct will receive. The final step in precincting is to assign all registered voters to their new precinct. The first step is to make small changes to the different district boundaries to align them better with each other. The Commission voted to allow these changes to their plan adopted on January 28, 2022. The changes were completed by January 31, 2022 and final redistricting maps reflecting these changes were made available to the public on February 1, 2022 on the Reapportionment website:

<https://elections.hawaii.gov/wp-content/uploads/HawaiiUnitRegions.pdf>  
<https://elections.hawaii.gov/wp-content/uploads/MauiUnitRegions.pdf>  
<https://elections.hawaii.gov/wp-content/uploads/KauaiUnitRegions.pdf>  
<https://elections.hawaii.gov/wp-content/uploads/OahuUnitRegions.pdf>

11 non-substantive changes were made to better align district boundaries. These changes affected 8 Senate districts, 12 House districts, and 13 census blocks statewide and reduced the number of “State House split by State Senate” districts to 33. Most of the changed census blocks had 0 (zero) population, one had a population of 11, one a population of 14.

Here’s a summary of the 11 changes:

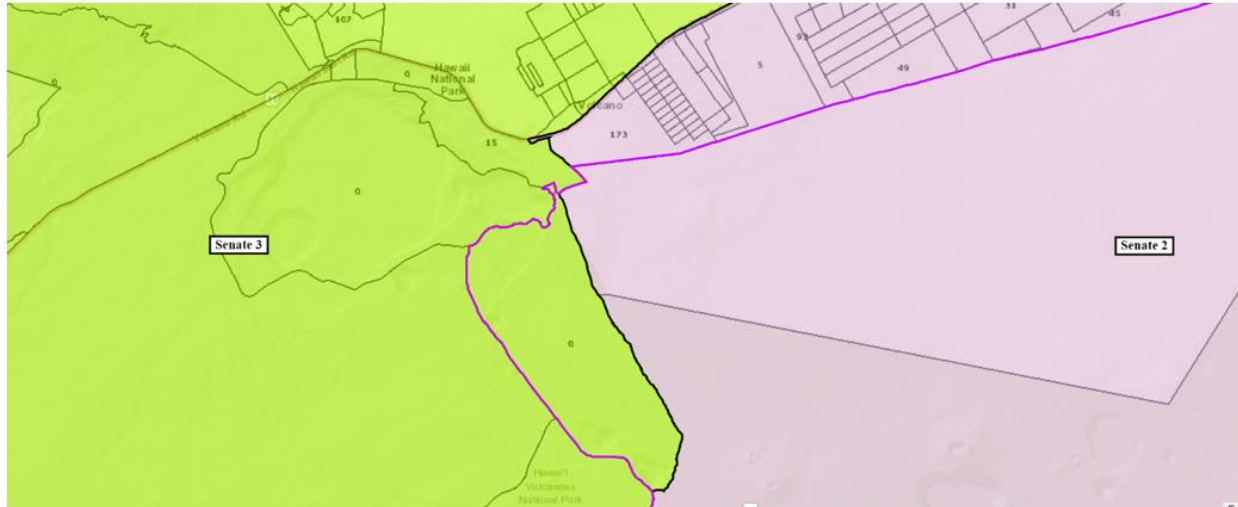
<u>Basic</u> <u>Island Unit</u>	<u>Districts</u> <u>Changed</u>	<u>Blocks</u> <u>Changed</u>	<u>Population</u> <u>Changed</u>	<u>Districts</u> <u>Matched</u>
Hawaii	Senate 3 to 2	1	0	House 4 and 5
Hawaii	Senate 3 to 4	1	0	House 5 and 7
Maui	House 11 to 9	1	0	Senate 5 and 6
Maui	House 14 to 10	1	0	Senate 5 and 6
Oahu	Senate 21 to 19	2	11	House 39, 40 and 42
Oahu	Senate 19 to 20	1	0	House 39 and 40
Oahu	Senate 10 to 11	1	0	House 21 and 22
Oahu	House 26 to 27	1	0	Senate 11 and 13
Oahu	House 28 to 30	2	0	Senate 13 and 14
Oahu	House 47 to 48	1	0	Senate 23
Oahu	House 42 to 41	1	14	Council I and IX

Below are all maps showing all 11 changes made.

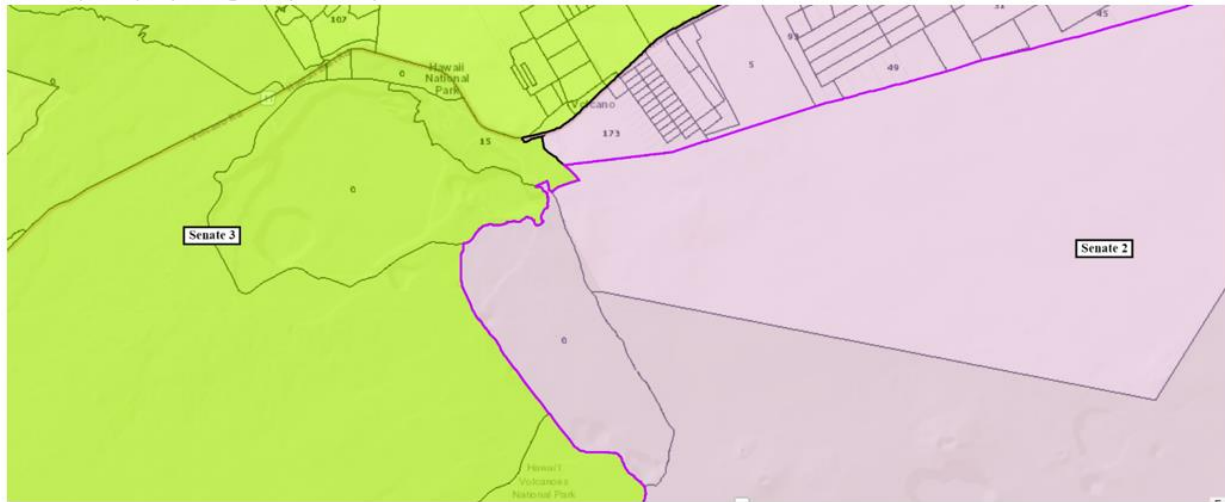
## Change #1

Hawaii BIU Senate Block Change #1 – From Senate 3 to Senate 2 to match House 4/5 boundary (purple)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



The maps above show how one census block assignment was changed for the State Senate in order to better match the State House boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation. This change reduced the number of split Senate/House districts for the Hawaii Basic Island Unit.

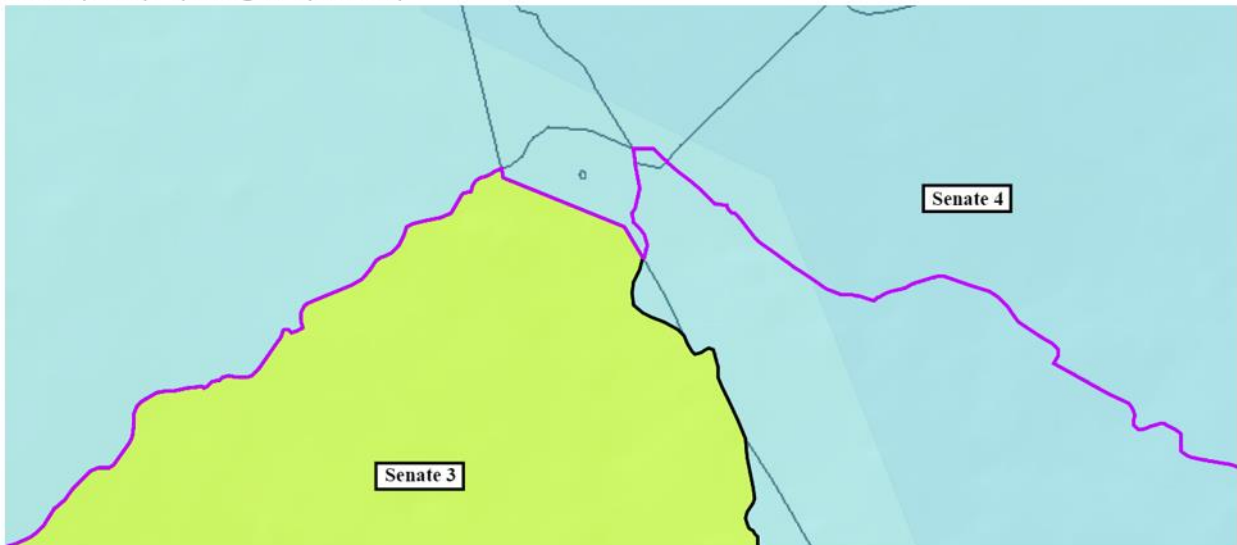
## Change #2

Hawaii BIU Senate Block Change #2 – From Senate 3 to Senate 4 to match House 5/7 boundary (purple)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



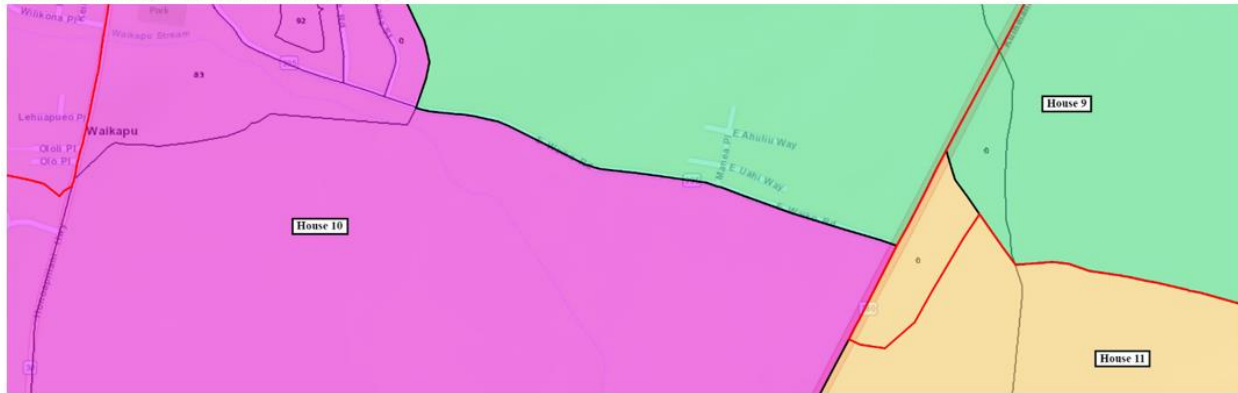
The maps above show how one census block assignment was changed for the State Senate in order to better match the State House boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.



### Change #3

Maui BIU House Block Change #1 – From House 11 to House 9 to match Senate 5/6 boundary (red)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)

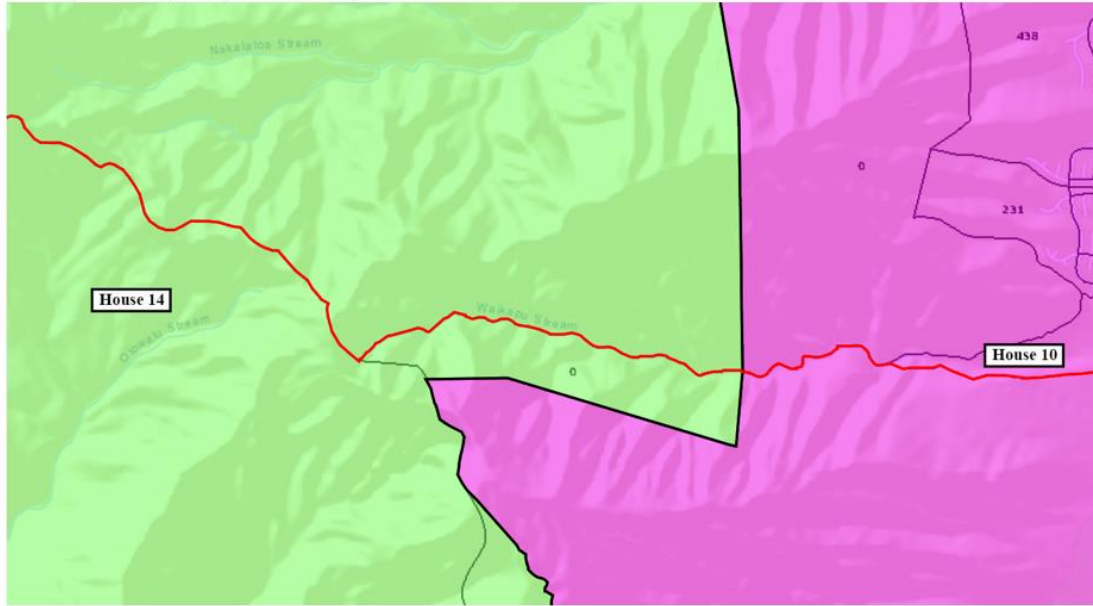


The maps above show how one census block assignment was changed for the State House in order to better match the State Senate boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation. This change reduced the number of split Senate/House districts for the Maui Basic Island Unit.

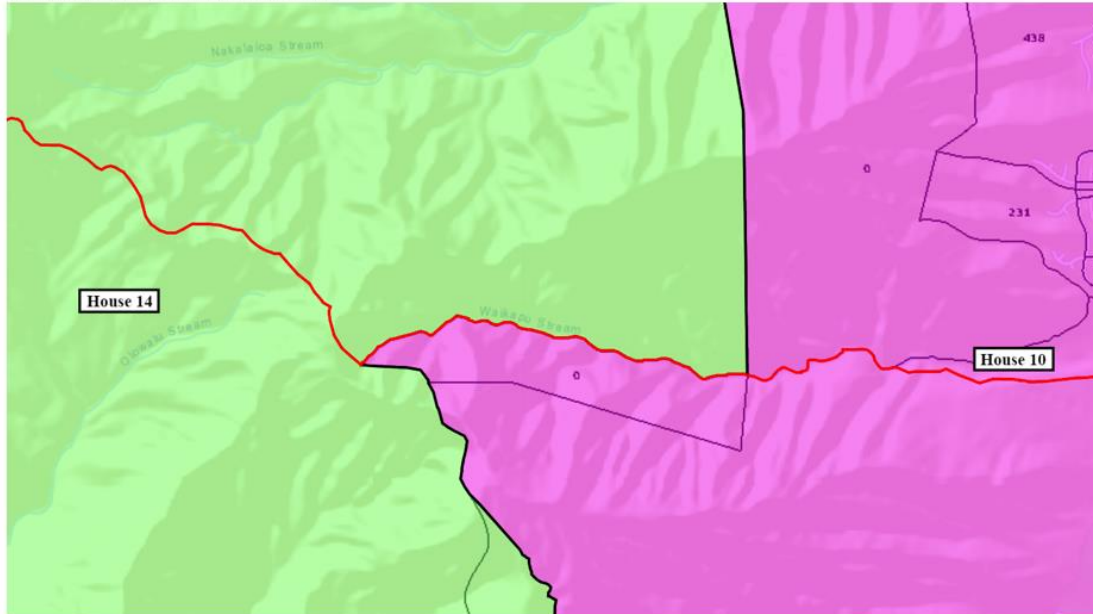
## Change #4

Maui BIU House Block Change #2 – From House 14 to House 10 to match Senate 5/6 boundary (red)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)

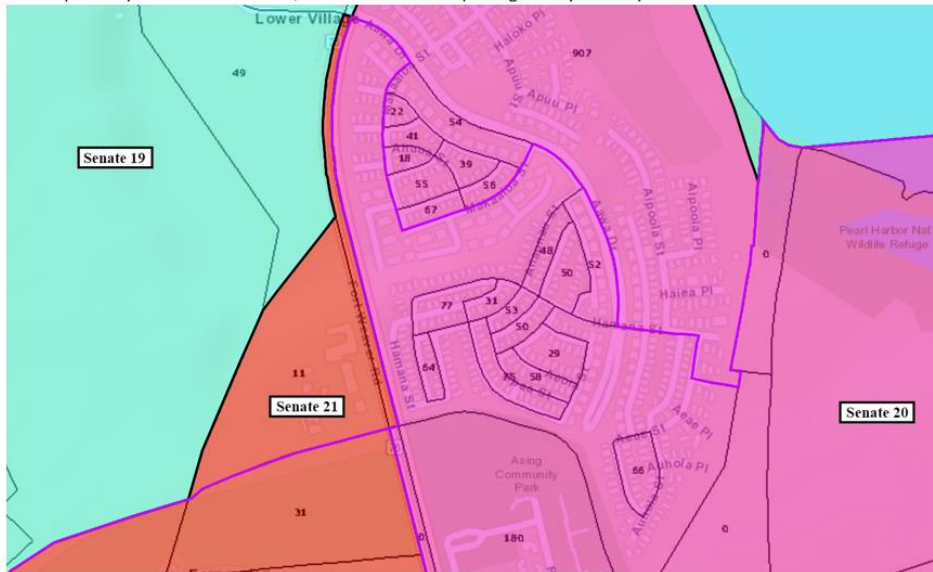


The maps above show how one census block assignment was changed for the State House in order to better match the State Senate boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.

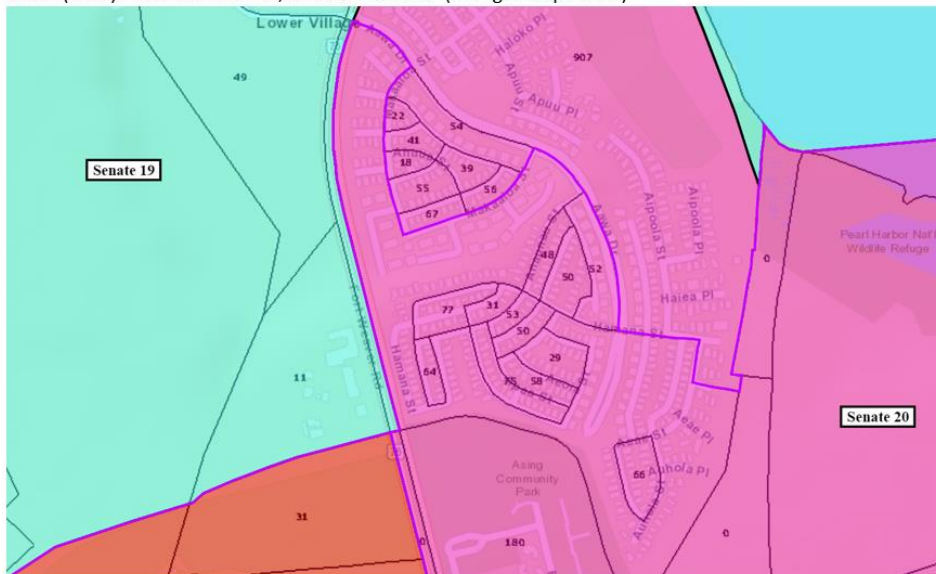
## Change #5

Oahu BIU Senate Block Change #1 – From Senate 21 to Senate 19 to match House 39/40/42 boundary (purple)

Detail (before): S19 dev = 2.06%, S21 dev = 2.19% (changes 11 persons)



Detail (after): S19 dev = 2.08%, S21 dev = 2.17% (changes 11 persons)

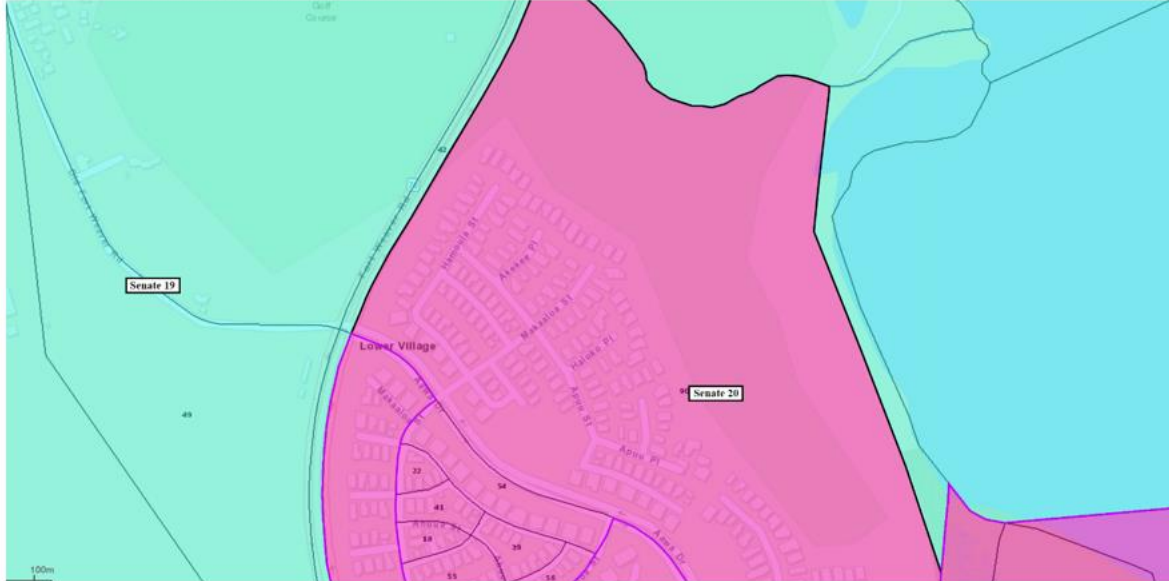


The maps above show how two census block assignments were changed for the State Senate in order to better match the State House boundary. The population of the changed census blocks was 11 (eleven) so there was a small change in district deviation but no impact on the basic island unit deviation. This change reduced the number of split Senate/House districts for the Oahu Basic Island Unit.

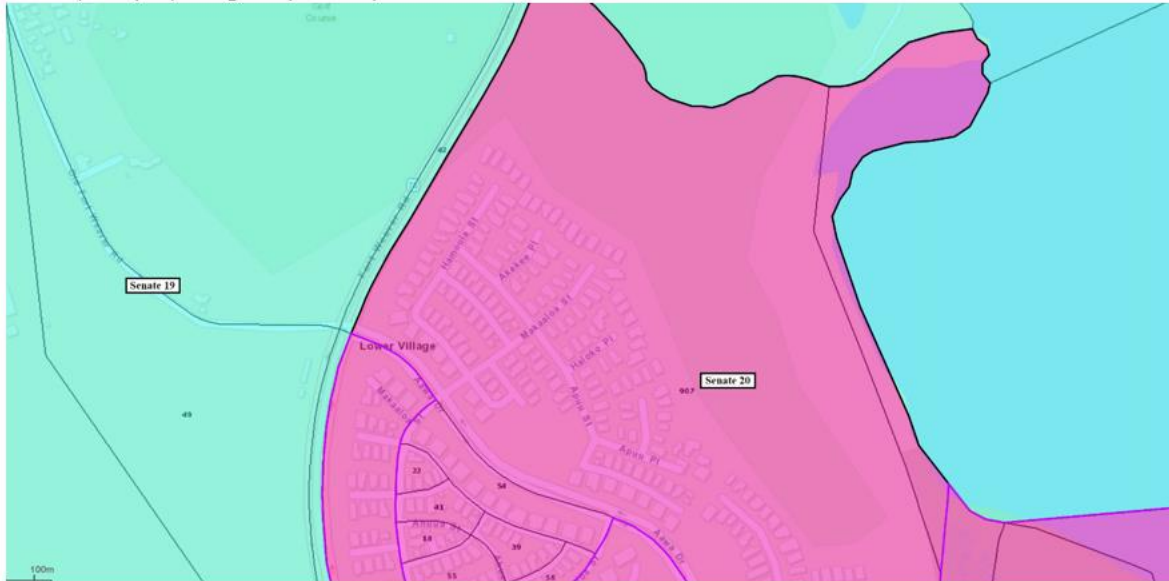
## Change #6

Oahu BIU Senate Block Change #2 – From Senate 19 to Senate 20 to match House 39/40 (purple)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



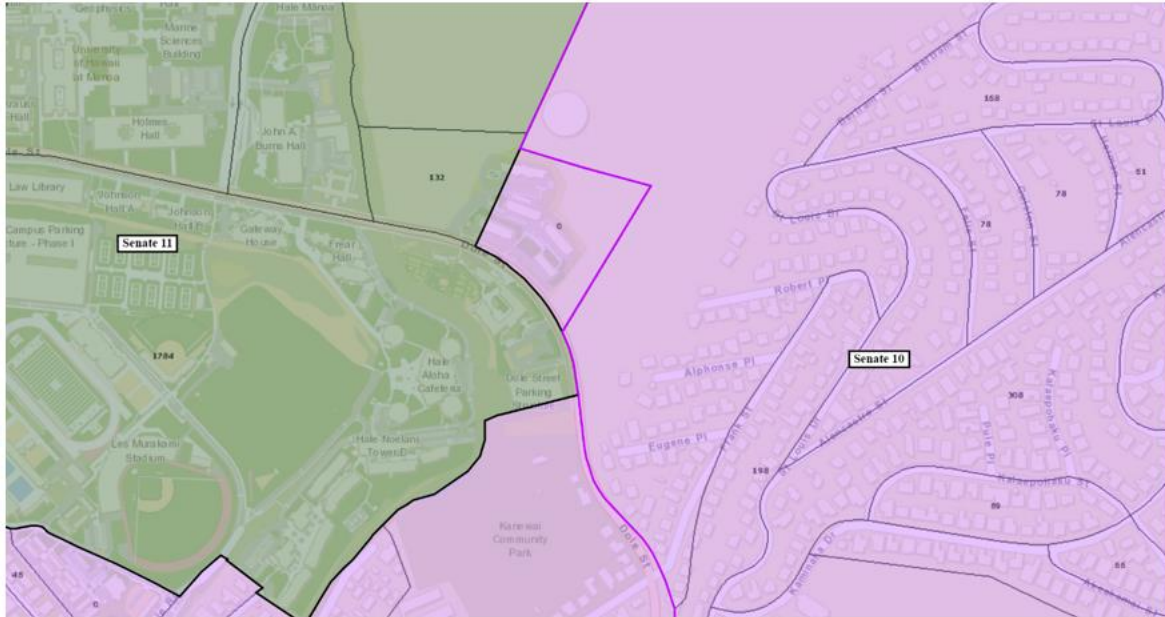
The maps above show how one census block assignment was changed for the State Senate in order to better match the State House boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.



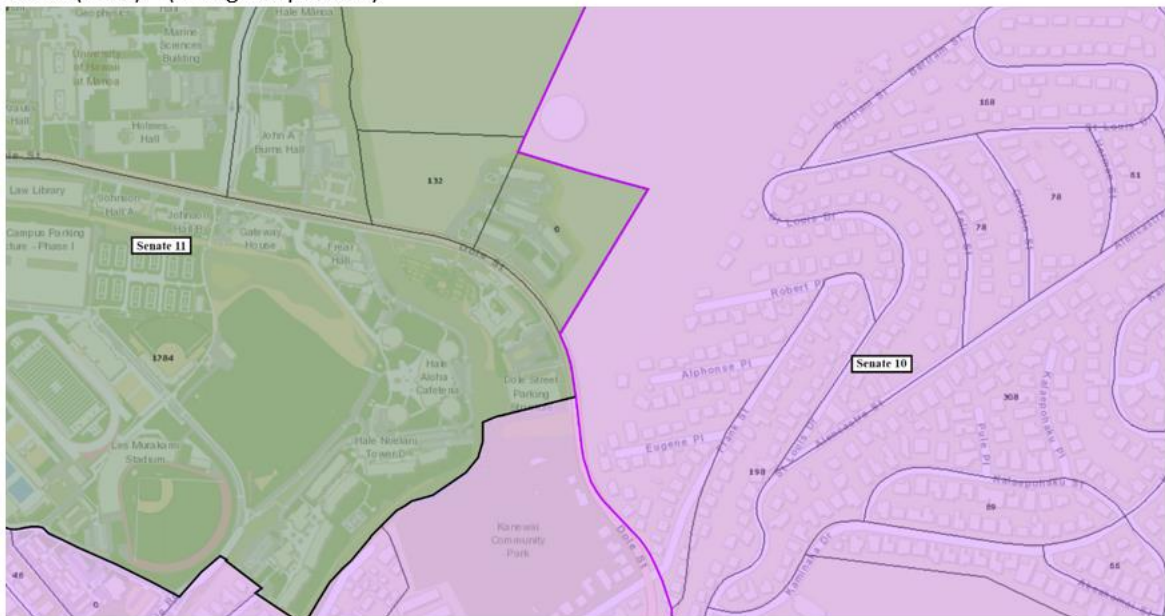
## Change #7

Oahu BIU Senate Block Change #3 – From Senate 10 to Senate 11 to match House 21/22 boundary (purple)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



The maps above show how one census block assignment was changed for the State Senate in order to better match the State House boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.

## Change #8

Oahu BIU House Block Change #1 – From House 26 to House 27 to match Senate 11/13 boundary (red)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



The maps above show how one census block assignment was changed for the State House in order to better match the State Senate boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.

## Change #9

Oahu BIU House Block Change #2 – From House 28 to House 30 to match Senate 13/14 boundary (red)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



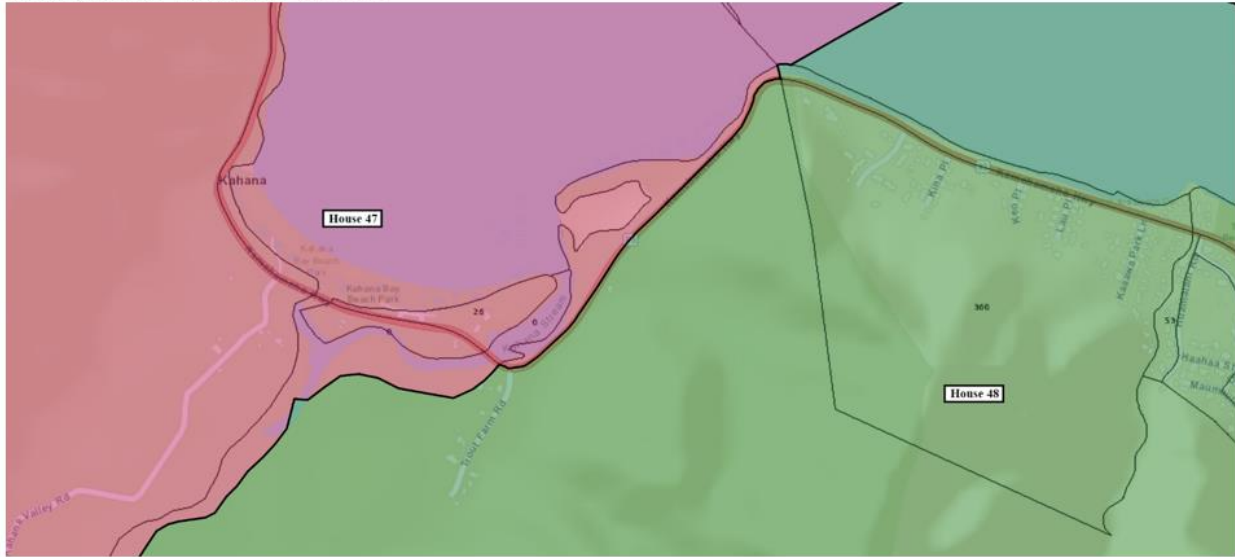
The maps above show how two census block assignments were changed for the State House in order to better match the State Senate boundary. The population of the changed census blocks was zero so there was no impact on the basic island unit deviation. This change reduced the number of split Senate/House districts for the Oahu Basic Island Unit.



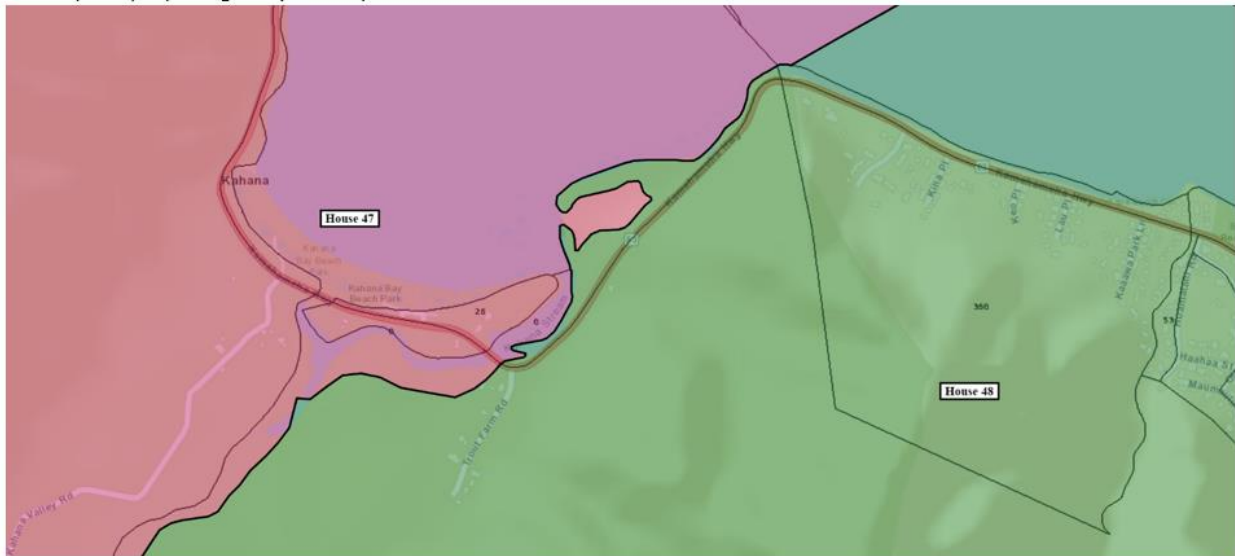
## Change #10

Oahu BIU House Block Change #3 – From House 47 to House 48 to match Senate 23 boundary (not shown)

Detail (before): (changes 0 persons)



Detail (after): (changes 0 persons)



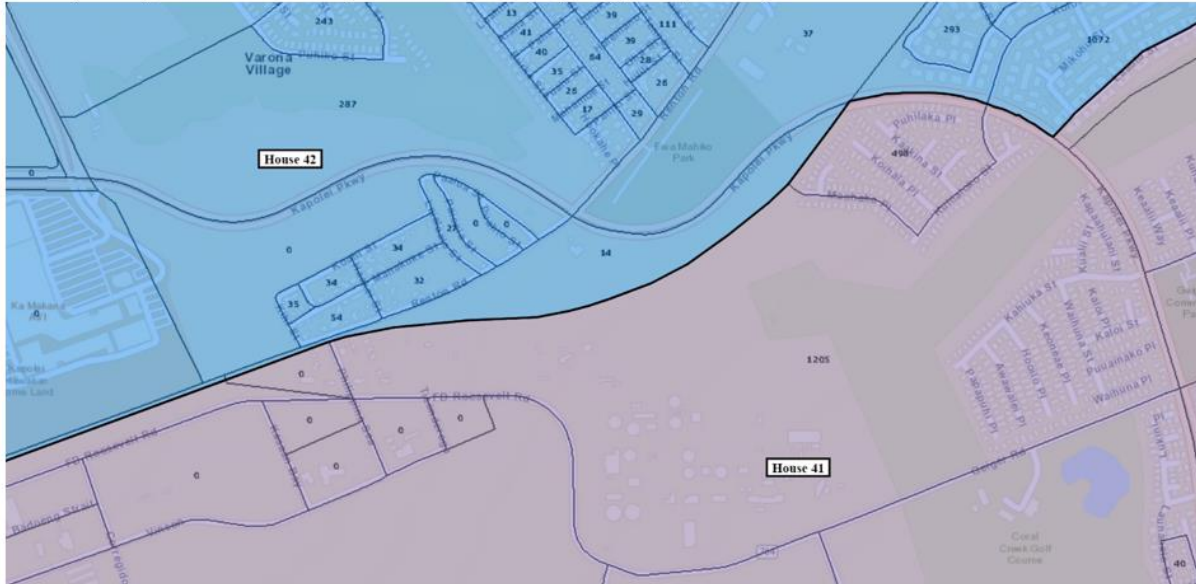
The maps above show how one census block assignment was changed for the State House in order to better match the State Senate boundary. The population of the changed census block was zero so there was no impact on the basic island unit deviation.



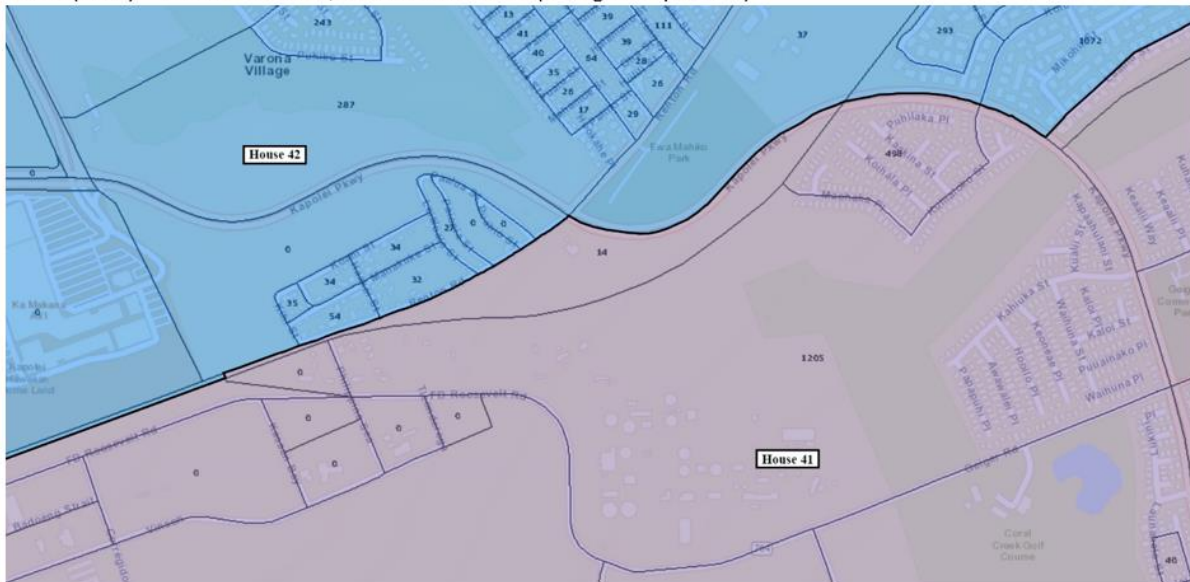
## Change #11

Oahu BIU House Block Change #4 – From House 42 to House 41 to match County Council I/IX boundary (not shown)

Detail (before): H41 dev = 0.49%, H42 dev = -1.08% (changes 14 persons)



Detail (after): H41 dev = 0.54%, H42 dev = -1.13% (changes 14 persons)



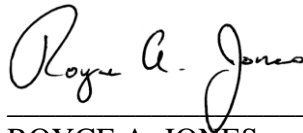
The maps above show how one census block assignment was changed for the State Senate in order to better match the County Council boundary. The population of the changed census block was 14 (fourteen) so there was a small change in district deviation but no impact on the basic island unit deviation.

18. I have provided GIS technical support to the 2001, 2011 and 2021 Commissions. I have heard public testimony provided to all those Commissions. I have not heard a consensus expressed on split districts nor on split communities. I've heard testifiers, including the Petitioners, say no to split districts, they want exactly two House districts within one Senate district. I have not heard consensus on split communities. I've heard testifiers say no to split communities, we want our community represented by one Senator and one Representative. I've also heard testifiers say they like having multiple legislators represent their community, it means more possibilities of getting legislators to help with an issue. Each testifier spoke about protecting their community and why their community was important. What varied was what they considered their community. Sometimes it was their neighborhood board. Sometimes it was their town. Sometimes it was their community association. Sometimes it was their valley. Sometimes it was their ahupuaa. There was no consensus on which community was most important to protect and not split.

19. Everyone has their own opinion of what is "best," which criteria are more and less important. It is my opinion that it is simply not possible for the Commission to adopt a Plan that everyone agrees is "best". Based on my observations and in light of my experience, it is my opinion that the Commission's Plan adopted on January 28, 2022 did meet all criteria and was completed by the required deadlines.

I, ROYCE A. JONES, declare under penalty of law that the foregoing is true and correct.

DATED: Honolulu, Hawai'i, March 11, 2022.

A handwritten signature in cursive script that reads "Royce A. Jones". The signature is written in black ink and is positioned above a horizontal line.

ROYCE A. JONES