

# Environmental Council 2018 Annual Report

January 31, 2019

Prepared pursuant to Section 341-6, Hawai'i Revised Statutes:

**§ 341-6 Functions of the environmental council.** The council shall serve as a liaison between the director and the general public by soliciting information, opinions, complaints, recommendations, and advice concerning ecology and environmental quality through public hearings or any other means and by publicizing such matters as requested by the director pursuant to section 341-4(b)(3). The council may make recommendations concerning ecology and environmental quality to the director and shall meet at the call of the council chairperson or the director upon notifying the council chairperson.

**The council shall monitor the progress of state, county, and federal agencies in achieving the State's environmental goals and policies and with the assistance of the director shall make an annual report with recommendations for improvement to the governor, the legislature, and the public no later than January 31 of each year. All state and county agencies shall cooperate with the council and assist in the preparation of such a report by responding to requests for information made by the council.**

The council may delegate to any person such power or authority vested in the council as it deems reasonable and proper for the effective administration of this section and chapter 343, except the power to make, amend, or repeal rules.

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## Environmental Council Chair's Message

By Puananionaona Thoene, Environmental Council Chair

2018 proved to be a busy and eventful year for the Council as it continued its efforts to update the EIS rules. The Council began updating the rules in 2011, but the effort was unfortunately put on hold from 2012 to 2016 when the Council was unable to make quorum. In 2016, Governor Ige appointed a full Council, allowing it to proceed with updating the rules among other business. Continuing with last year's focus of creating rules that are balanced between social, environmental, and economic considerations, the Council strove to promulgate rules that are clearer, workable for practitioners, and aligned with the actual process and case law (both substantively and chronologically).

Beginning in 2016, the Council reviewed the work undertaken in 2012, including public comments on a proposed revised draft. The Council tasked a Permitted Interaction Group to review those comments and to draft revised language. The Council then prepared a draft of the proposed rules based on that feedback and others received from the public, stakeholders, agencies, and Council members over the course of several meetings from 2016 through early 2018. In addition to the traditional forms of submitting comments (i.e., by mail or e-mail), OEQC arranged for use of CiviComment, an online platform which allowed users to review and comment on the latest draft of the rules. Use of this up-to-date technology allowed the Council and OEQC to do outreach on the proposed rules in an even broader way, and to capture input in a format that allowed everyone an opportunity to participate, and even provided for anonymity. During this pre-consultation period, the Council received more than 250 comments by approximately 21 identified commenters and an unidentified number of anonymous commenters.

In March 2018, the Council approved Version 1.0 (the "Proposed Rules") for public hearing and comment. The Notice of Public Hearings was published on April 20, 2018, kicking off the 30-day comment period. During that 30-day comment period, the Council held nine public hearings from May 21-31, 2018, two each on O'ahu, Hawai'i Island, and Maui, and one each on Lāna'i, Moloka'i, and Kaua'i. The Council received oral comments from 29 individuals and written comments from 36 individuals during the public hearings and formal comment period, although attendance at the public hearings was higher than the number of commenters reflects. The Council believes this is attributed to the extensive outreach we did during the pre-consultation period.

In June 2018, the Council created another Permitted Interaction Group to review the oral and written comments received during the formal comment period and determine if any edits to the Proposed Rules were warranted.

To accommodate this robust process, OEQC created a webpage dedicated to the Rules Update, which included links to all working versions of the draft rules and related documents, Council agendas and meeting minutes, and the rules update timeline. This webpage also allowed interested parties a means of signing up for listserv and providing online comments. Agencies, practitioners, and members of the public were encouraged and did attend meetings and provide comments at various stages of the process. Members of the Council also met with agencies, stakeholders, and members of the public through one-on-one meetings or presentations to groups.

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In addition, the Council published two valuable tools to help agencies, practitioners, and the public transition to the new rules: an Unofficial Ramseyer document (depicting the changes made to the 1996 Rules by the Draft and Final Proposed Rules at each stage of rulemaking); as well as a Rationale document explaining the reason for the revisions to each section of the rules. Given the many changes made to the rules, which includes a complete reorganization of almost every section, the Council encourages all to read the official version of the rules with the Unofficial Ramseyer and Rationale documents.

While the rules update was the primary focus of the Council this past year, the Council also submitted testimony on legislation related to HRS Chapter 343, organized and moderated a forum on toxoplasmosis (in partnership with the William S. Richardson School of Law), and heard presentations from various stakeholders on commercial aquarium fisheries.

Sadly, this year we also said *a hui hou* to former Council Chair Joseph Shacat who left Hawai'i in March 2018 for a new job opportunity. The Council sends its aloha to Joseph and thanks him for his leadership and years of work that got us to where we are today. The Council also wishes to thank the William S. Richardson School of Law for its invaluable assistance in getting the final rules completed, as well as the agencies, stakeholders, and members of the public who took the time to come to Council meetings and provide comments on the rules throughout this long process.

In 2019, we look forward to another productive year and recognize that it will be one of transition. The Council has approved the final version of the rules which will proceed to final review by Governor Ige. The Council's next task is to consider how best to work with OEQC to do additional outreach and prepare agencies and the public for the new rules.

## Office of Environmental Quality Control Director's Message

By Scott Glenn, OEQC Director

2018 was a year of accomplishment for the OEQC and the Council, despite staffing and budgeting challenges.

While the Council has no line-item budget or staff of its own, it works with the OEQC to produce its annual report. The obligation for a volunteer board to monitor government progress on state agencies without dedicated funding and staff is arduous. It is essentially an unfunded mandate that ends up being supported by the OEQC staff using OEQC's limited budget. In light of discussions the administration and Legislature have had about data, dashboards, and reporting, perhaps it is time for the Legislature to revisit this particular obligation of the Council.

The OEQC entered 2018 staffed with only three of the five positions filled with permanent, full-time employees. The OEQC did not have a second planner until May or a secretary until August and that secretary was only with us for a few months. OEQC found a secretary just before the end of 2018 and so we begin 2019 fully staffed. Regardless of OEQC staff shortages, the OEQC and Council were able to move forward with three major initiatives.

First, the OEQC supported the Council with completing the Final Proposed Rules. This has been a major effort 10 years in the making. The OEQC received invaluable support from the UH William S. Richardson School of Law.

I cannot express enough appreciation to our current 13 volunteer Council members for following through on their commitment to update the administrative rules. This involved a tremendous amount of time and energy on their part, including several days a month for meetings and studying the rules. They met as often as twice a month for several months. This is especially the case for the eight neighbor island members who often have to leave their homes before dawn to fly to O'ahu for a day full of committee meetings and then the full Council meeting.

Secondly, OEQC supported Governor Ige and the administration on several major initiatives: Governor Ige's Sustainable Hawai'i Initiative; Hawai'i's portion of the U.S. Climate Alliance commitment to the Paris Agreement; and the Global Green Island Summit commitment to collaboration among Hawai'i, Okinawa, Jeju, and Hainan.

Thirdly, OEQC continued to fine tune internal business processes and prepare for changes to how OEQC will intake and publish environmental review documents under the new rules. We are continuing to build out our digital records. This includes providing seed funding to a project led by Dr. Kieko Matteson and Dr. Sara Bolduc to recover and digitize EAs and EISs from the shuttered University of Hawai'i Environmental Center that are not in the OEQC online library currently, as well as identify important documents for preservation at the UH Library.

Looking forward to 2019, the OEQC will work with the Council to create guidance on the new rules, work with state and county agencies to prepare for adoption of the new rules, continue our digitization project, and continue to support the Governor and administration on fulfilling our goals with respect to the Sustainable Hawai'i Initiative, the Paris Agreement, and the Global Green Island Summit.

## 2018 Annual Report Introduction

By statute, the Environmental Council is responsible for producing an annual report on the State's progress toward achieving Hawai'i's environmental goals.

The state environmental goals and policies are primarily expressed in Chapter 344, HRS. Chapter 344 establishes broad policies and guidelines relating to environmental quality. These guidelines, in turn, are left to agencies and the Council to figure out how best to measure progress towards achieving these goals and policies.

Over the years, the Council has monitored progress in different ways. One way used an "Indicators Report Card" format that assigned grades to different aspects of the environment, such as an "A" for air quality. These indicators were based on data drawn from state, county, and federal agencies. The Council supplemented these indicators with thematic environmental information, such as the 2008 report on food security and food self-sufficiency (a topic still relevant 10 years later).

The recent discussion in Australia of the risk of an oil spill in the Great Australian Bight as being good for the local economy underscores our global need for a more holistic accounting of environmental resources than what Gross Domestic Product provides. Here in Hawai'i, where our economy is our environment, Hawai'i Gross State Product measures the movement of money such as the economic benefit to businesses providing services to almost 10 million tourists who visit our world-class beaches, but it does not measure the thousands of residents who volunteer their weekends and holidays cleaning our beaches of plastic and garbage to keep the beaches beautiful for residents and tourists alike. This is why the Council continues its look at the Genuine Progress Indicator (GPI) as a more holistic, integrated measurement of sustainability and progress on Hawai'i's environmental goals.

The major topic of this year's report is the Council's completion of proposing changes to the administrative rules for the EIS process. In addition, the Council has highlighted topics the Council examined during 2018:

- Genuine Progress Indicator, by Dr. Kirsten Oleson (University of Hawai'i) and Dr. Regina Ostergaard-Klem (Hawai'i Pacific University)
- Biosecurity & Invasive Species, by Dr. Joshua Atwood, Department of Land and Natural Resources

In 2019, the Council will continue to engage in constructive dialogue with all stakeholders to identify and promote reasonable approaches to resolving these challenges. References to these articles are available upon request to the OEQC.

At the end of the report is a presentation of what the OEQC published in *The Environmental Notice* in 2018. By statute and rule, the OEQC is required to publish environmental assessments (EAs) and environmental impact statements (EISs) on the 8th and 23rd of every month.

Finally, the report concludes with biographies of the individuals of the Council and the OEQC.

## Modernizing Hawai‘i’s EIS Rules

By Scott Glenn, OEQC Director

This year, the Environmental Council completed its proposed revisions to the administrative rules for the EIS process. To reach this point, the Council conducted a two-year outreach that involved multiple working drafts released for public comment, holding nine public hearings with at least one on each major island, and revising the draft rules based on the feedback received.

The purpose of the EIS process, as stated in its enabling statute, Chapter 343, Hawai‘i Revised Statutes:

*" . . . [t]hat the quality of humanity's environment is critical to humanity's well being, that humanity's activities have broad and profound effects upon the interrelations of all components of the environment, and that an environmental review process will integrate the review of environmental concerns with existing planning processes of the State and Counties and alert decision makers to significant environmental effects which may result from the implementation of certain actions. The legislature further finds that the process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole." (Section 343-1, HRS, Purpose)*

The process also requires public participation and as such points the way for how agencies in general can involve the public in decision making about public trust resources. The EIS process requires notice of the action and public comment periods and responses to comments for both EISs and EAs. Oftentimes, the environmental review process is the only or main opportunity for the public to weigh in on proposed developments or agency use of public resources. The information gathered helps agencies make informed decisions about the impacts of a proposed action on the environment, defined broadly to include all the physical, economic, cultural, and social conditions that exist within the area affected by a proposed action, including land, human and animal communities, air, water, minerals, flora, fauna, ambient noise, and objects of historic, cultural, or aesthetic significance. Given the expansive definition of “environment,” in many ways the EIS process is a process to help us become more sustainable before “sustainability” became a buzzword.

One of the Environmental Council’s foremost responsibilities is to develop and update implementing regulations (referred to as “the Rules”) for Chapter 343, Hawai‘i Revised Statutes (HRS). It has been 22 years since the Rules were last amended and compiled. The Council’s updated proposed rules modernize the process and bring the Rules into better alignment with the statute, case law, and practice.

### **A Brief History of the EIS Statute and Rules**

In 1974, Governor John Burns signed Act 246 into law, establishing the Environmental Impact Statement process, modeled after the National Environmental Policy Act. In 1983, the State Environmental Council was established and tasked with rule making authority for Chapter 343, HRS. In 1985, the Council promulgated Chapter 200, Title 11 of the Hawai‘i Administrative Rules, implementing Chapter 343, HRS.

The Rules have only been amended twice since 1985. In 1996, the Council amended the Rules to incorporate a 30-day public comment for actions that an approving agency anticipates will result in a

Finding of No Significant Impact (then referred to as a “Negative Declaration”). In 2007, the Rules were amended to add an exemption class for the acquisition of land for affordable housing, but the amendment was not compiled with the rest of the Rules.

Since at least 2007, the Council has sought to update the Rules. The Council traces its current effort to revisions first considered in 2011, when the public formally petitioned the Council to update the Rules. The Council initiated consultation with state and county agencies for recommendations on issues to address and language to revise and, in 2012, released a preliminary draft of revisions (Version 1) incorporating proposed revisions from previous Council efforts and issues raised by agencies and the public. The Council also distributed an Excel file called a “comment matrix” to receive feedback on Version 1. Agencies and the public (including applicants, consultants, and nonprofit organizations) submitted comments via the comment matrix. The Council organized the feedback into a master comment matrix and tasked the Rules Committee with addressing the feedback and revising the language. The Rules Committee met regularly over the course of 2012-2014 to revise Version 1. However, due to various administrative challenges, including maintaining quorum, the Council was not able to complete its work.

### **Public Outreach – Going Above and Beyond**

In February 2016, following Governor Ige’s appointment of seven members to the Council, the Council resolved its quorum challenges and moved forward on revisions to the Rules. The Council considered the potentially controversial nature of changing the EIS process, the number and scale of issues to be addressed, and the high bar of the formal rulemaking process. To improve the process and outcome, the Council decided at the beginning to enhance public engagement in the rulemaking effort, including actively seeking public input in ways unprecedented in state rulemaking.

First, the Council chose to prepare working drafts of proposed language changes. This approach was the Council’s way of “thinking out loud in public.” To emphasize the “working draft” nature of the documents, the Council approached this phase the way the software industry approaches initial software development, using rapid iteration. The working drafts follow the rapid iteration paradigm: prototype using mock-ups, issue identification, and explanations; review from stakeholders and the public on whether the proposed change addresses the issue; and refine based on feedback. Even the naming convention for the working drafts reflected the rapid iteration convention – Version 0.1, 0.2, etc. This approach gave stakeholders comfort that they would have ample input and notice when the Council would decide to go to a formal draft of proposed changes to be used for public hearings.

The Council included footnotes to give the reader a brief explanation of the Council’s reasoning for the proposed changes. These working drafts assisted the Council to:

- Engage stakeholders on the reasoning of the Council and solicit feedback on how the Council was approaching an issue.
- Show stakeholders and the public how potential language could look in the rules.
- Prompt stakeholders and the public to provide better language.
- Open up a space for discussion on alternative approaches to addressing the issue.



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Second, the Council adopted a modified Ramseyer format to show proposed changes. The standard approach to Ramseyer is to show new language using an underline and [~~language to be deleted using a strikethrough and enclosed in brackets~~]. This is useful for showing changes between two documents. However, it becomes more difficult to track changes in a rapid iteration approach. The Council wanted to help stakeholders follow the Council's thinking as it moved through multiple working drafts to show what was retained in a previous working draft, what was new to the latest iteration, and what was removed from the original language or previously proposed language. The Council developed a color-coded scheme that showed the differences across multiple working drafts and even continued to use this approach for the draft and final proposed rules. Also, based on public feedback, the Council bolded defined terms to alert the reader to when a word is being used in its technical meaning.

Once the Council decided to reorganize the sections and, because of the number of changes proposed, to repeal Chapter 11-200 and promulgate a new Chapter 11-200.1, the official Ramseyer format became less helpful for stakeholders and the public. This is because the Ramseyer format is to show the new chapter enclosed in quote marks but otherwise to not use strikethrough or underlining, according to the Legislative Reference Bureau. To help stakeholders and the public, the Council prepared "unofficial Ramseyer" versions that followed the Council's modified Ramseyer format and effectively served as guidance on what the actual proposed changes are. This approach was highly effective as most commenters on the draft proposed rules referred to the unofficial Ramseyer document in their comments more often than the official standard version.

Third, the Council wanted to enable the public to comment directly on proposed language without having to write letters or attend meetings. After researching online commenting platforms, the Council used the CiviComment platform (<http://oegc.civiccomment.org/>). CiviComment enabled the public to view the proposed rules and comment directly on them without having to write emails or letters. Note: CiviComment will be discontinued at the end of January. OEQC will archive the comments on its website.

The Council also created a page on its website dedicated to the Rules update (<http://health.hawaii.gov/oegc/rules-update/>), including a timeline (see below for timeline of major milestones), instructions for commenting, and a sign-up box to receive updates on the Rules process. Public comments were also accepted at all Council meetings. In addition, Council members spoke on local radio shows, gave presentations to community, environmental business and agency groups, and spread the word through social media.

Fourth, the Council prepared a "Rationale Document" which served as an explanation of the rules, a roadmap to changes from the existing 1996 Rules to the draft and final proposed rules, and a history of the process. The Council introduced the Rationale Document with Version 0.4 once the footnotes became too complex and much of the reasoning had reached consensus. The Rationale Document is divided into three main sections. The first section, the Introduction, describes the history of the review process as well as the process moving forward. The second section, Global Discussion Points, describes the general changes between the 1996 Rules and the proposed rules. The third section, Section-Specific Changes, specifically addresses the proposed changes in each subsection.

Fifth, the Council decided to hold more public hearings than required. The Council already has a different standard for public hearings on rulemaking than is usual. Chapter 91, HRS, requires one statewide hearing on draft rules. Chapter 343, HRS, imposes a higher standard, which is to conduct one

hearing in each county (for a total of four hearings). However, the Council wanted to ensure people on each island had an opportunity to participate. In total, the Council held nine (9) public hearings with at least one on each of the major islands: O‘ahu (2), Hawai‘i (2), Maui (2), Moloka‘i, Lāna‘i, and Kaua‘i.

Finally, by doing this extensive documentation and outreach, the Council intends for this material to serve as administrative history for future agency decision makers, the courts, OEQC staff, and Council members. In the future, should these rules be adopted into law, a question might arise about what was meant by a particular phrase in the updated rules. The decision maker can review these working drafts and supporting documents to better understand the intent of the Council.

### **Drafting the Rules: 1996 Language -> Working Drafts -> Draft -> Final**

To assist the Council in moving from the 1996 Rules to final proposed language, the Council made use of permitted interaction groups (PIGs) and committee meetings. The following is a brief description of each major step in the update.

#### *2016 Permitted Interaction Group*

At the beginning of the current rulemaking effort, the Council wanted to recognize the extensive outreach and drafting that started in 2011. To do this, the Council established a PIG (referred to as the “2016 PIG”) in February 2016 to draft revisions to the Rules for the Rules Committee of the Council to review, based primarily on the previous effort.

The 2016 PIG’s revisions were presented to the Council for discussion in the summer of 2017, and referred to as Version 0.1. The Council requested both agency comment and public input. During this time, the OEQC also contracted the UH William S. Richardson School of Law to assist the OEQC with drafting proposed language for the Council.

#### *Rules Update Version 0.1*

At the July 2017 meeting, the 2016 PIG presented Version 0.1 to the Council for consideration (refer to Version 0.1 for additional background information) and public review. At the August 2017 meeting, the Council approved Version 0.1 as the baseline document for further edits and to serve as a foundation for early consulting with affected agencies, citizen groups, and the general public. The Council’s approval of Version 0.1 concluded the work of the 2016 PIG.

#### *Rules Update Version 0.2*

In September 2017, the Council released Version 0.2, incorporating Council discussions to date, and public and agency input. Version 0.2 updated almost every section of the 1996 Rules. The Council again requested input from the public and agencies. Version 0.2 incorporated public and agency comments, as well as comments submitted by Council members.

#### *Rules Update Version 0.3*

In October 2017, the Council released Version 0.3, which refined several sections based on public feedback. Most notably, Version 0.3 reorganized, added, and deleted sections of the 1996 Rules. The purpose of the reorganization was to ensure that the structure of the rules more closely followed the sequence of steps in the environmental review process.

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### *Rules Update Version 0.4*

The Council released Version 0.4 in February 2018. This version was voted on by the Council to go to a formal public comment period, including public hearings in each county (and each island). The Council prepared Version 0.4a to incorporate additional “housekeeping” updates (i.e., spelling/grammatical corrections) and other minor corrections. The Council considered Version 0.4a at the March 6, 2018 Council meeting and voted 13-0-0 (with two excused) to approve Version 0.4a, as amended (referred to as the “Proposed Rules”) to be the draft to use for public hearings.

### *Rules Update Version 1.0 – Official Draft Proposed Rules*

The Council finalized Version 0.4a as Version 1.0 and published it for formal public hearings. Version 1.0 served as the basis for public comments. Included in the package of documents for Version 1.0 was the Rationale Document explaining the Council’s process to-date and the proposed changes. The Council also released an “unofficial Ramseyer” format of the proposed changes using the formatting approach it had developed for the working drafts.

### *2018 Permitted Interaction Group*

Following the public hearings conducted in May 2018, the Council created another PIG (2018 PIG) in June 2018. The Council charged the 2018 PIG to: (1) review and respond to the written and oral comments received at the public hearings and during the comment period; and (2) prepare a report to the Council on changes to the Proposed Rules recommended by the 2018 PIG.

In October 2018, the 2018 PIG published the Report of the Environmental Council Permitted Interaction Group (2018 PIG Report). The PIG Report provided discussion points for the Council in considering whether to modify the proposed rules based on the oral and written comments received during the public comment period.

### *Rules Update Version 1.1*

The Council held two meetings in November 2018 to amend Version 1.0 based on oral and written comments and informed by the 2018 PIG report. The Council finalized these changes in December 2018 with additional minor amendments and approved the motion to recommend to the Governor to repeal Chapter 11-200, HAR, and promulgate the proposed Chapter 11-200.1, HAR.

### *Rules Update Version 2.0 – Official Final Proposed Rules (TBD)*

Any technical changes as recommended by the Legislative Reference Bureau or the Attorney General would be incorporated and finalized as Version 2.0 to be presented to the Small Business Regulatory Review Board and the Governor.

### **Major Themes in the Revisions**

In choosing to pursue updating the rules, the Council adopted the following principles to guide its work:

- Be consistent with the intent and language of chapter 343, HRS;
- Align statutes, case law, and practice wherever feasible;

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- Increase clarity of the process and legal requirements; and
- Align with the National Environmental Policy Act (NEPA) where applicable.

The major change to the Rules is a reorganization of the current Chapter 11-200, HAR, to more closely reflect the steps that agencies and applicants follow when preparing EAs or EISs.

Other changes are legislatively driven. In 2012, the legislature passed Act 50, requiring a cultural assessment as part of an EA or EIS. The Final Proposed Rules insert “cultural” into in the definition of environment and in several other places within the Rules as mandated by the Act. The proposed Rules also introduce a public scoping meeting requirement prior to preparation of a draft EIS to help balance the new legislatively created direct-to-EIS pathway, that allows applicants and agencies to prepare an EIS without first preparing an EA. The Council also integrated the state sea level rise exposure area into the significance criteria so that agencies would have to consider it in deciding whether to issue an exemption notices or require an EA or EIS for a particular action.

The Final Proposed Rules also offers definitions of “project” and “program,” encouraging the preparation of programmatic EAs and EISs when appropriate by more clearly distinguishing what level of information needs to be included in an EA or EIS prepared for a project from what needs to be included in an EA or EIS for a program.

The Council introduced new rules on tracking an action’s compliance with Chapter 343, HRS, as it moves through the permitting process. This process, referred to as the “green sheet” based on the City and County of Honolulu Department of Planning and Permitting practice of using their form on a green sheet, is for agencies to examine: (1) whether a proposed activity is covered by an existing environmental review document; (2) the level of review necessary for a proposed action; and (3) whether a proposed action requires additional review. Agencies have the option to publish this in *The Environmental Notice* to notify the public.

Further, the Rules requires electronic submittal for publication in *The Environmental Notice*, and its distribution as well as for distributing exemption notices, EAs, and EISs. The Rules also proposes changes to the exemption process and what agencies are required to do to notify the public of exemption determinations.

In addition to the above, the Final Proposed Rules addressed the following:

- “Housekeeping” (i.e., spelling/grammatical corrections);
- Clarifying definitions and aligning them with statutory definitions, including distinguishing between a program and a project;
- Updating requirements and procedures to publish in the OEQC periodic bulletin (i.e., *The Environmental Notice*), including republication for unusual situations;
- Modernizing submittals, deadlines, comment and response, and distribution to recognize electronic communication;
- Clarifying roles and responsibilities of proposing agencies, approving agencies, and accepting authorities in the environmental review process;

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- Clarifying the environmental review process as it applies to states of emergency and emergency actions;
- Clarifying significance criteria thresholds for determining whether to issue an exemption notice, FONSI, or EISPN, including incorporating consideration of the impacts of sea level rise and greenhouse gases as significance criteria;
- Requiring agency exemption lists to be categorized into two parts: (1) allowing for agencies to designate certain activities as *de minimis* and therefore not requiring exemption documentation; and (2) those activities requiring exemption documentation and publication in the periodic bulletin.
- Revising the requirements and procedures for creating exemption lists and exempting actions from further environmental review, setting clearer thresholds for exemptions and the role of exemption lists, and publishing lists of exemption notices monthly
- Clarifying style standards and content requirements for EAs and EISs;
- Clarifying when and how to proceed directly to preparing an EIS instead of an EA;
- Revising requirements for conducting scoping meetings following an EISPN, including submission to OEQC of an audio recording of oral comments received at the public scoping meeting(s);
- Revising the comment and response requirements and procedures for EAs and EISs, including responding to form letters and petitions and grouping responses to like comments;
- Revising procedures for joint federal-state environmental review;
- Clarifying acceptance criteria;
- Clarifying procedures for appealing non-acceptance to the Council;
- Consolidating into one section the requirements and procedures for determining when to do a supplemental EIS, and aligning the requirements with statute and case law; and
- Adding a retroactivity section for actions that have already completed environmental review or are undergoing review at the time the rules would be enacted.

### **Moving Forward**

The next steps for the rules update are to present the proposed final rules to the Small Business Regulatory Review Board and, pending that outcome, to the Governor for signing into law. The OEQC will assist agencies with preparing for the implementation of the new aspects of the rules by preparing guidance. The OEQC will also update its guidebook for practitioners and the citizen's guide so that the public can more effectively participate in the environmental review process.

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Timeline of Major Rules Update Milestones

Date	Milestone
February 2016	<ul style="list-style-type: none"> <li>• Council initiates Permitted Interaction Group (PIG) to review prior rulemaking</li> </ul>
July 2017	<ul style="list-style-type: none"> <li>• 2016 PIG presents Version 0.1 to the Council</li> </ul>
August 2017	<ul style="list-style-type: none"> <li>• Council adopts Version 0.1 as its baseline working draft for rulemaking</li> </ul>
September 2017	<ul style="list-style-type: none"> <li>• Council releases Version 0.2</li> </ul>
November 2017	<ul style="list-style-type: none"> <li>• Council releases Version 0.3</li> </ul>
February 2018	<ul style="list-style-type: none"> <li>• Council releases Version 0.4</li> </ul>
March 2018	<ul style="list-style-type: none"> <li>• Council releases Version 0.4a with minor technical and clarifying amendments</li> <li>• Council adopts Version 0.4a as its official draft Version 1.0</li> <li>• Small Business Regulatory Review Board recommends to Governor to authorize the Council to take the Draft Rules to public hearing</li> <li>• Governor Ige authorizes the Council to conduct public hearings</li> </ul>
April 2018	<ul style="list-style-type: none"> <li>• Council notifies the public of public hearings for the Draft Proposed Rules</li> </ul>
May 2018	<ul style="list-style-type: none"> <li>• Council conducts nine (9) public hearings: O‘ahu (2), Hawai‘i (2), Maui (2), Moloka‘i, Lāna‘i, Kaua‘i</li> </ul>
June 2018	<ul style="list-style-type: none"> <li>• Deadline to submit written comments on the Draft Proposed Rules</li> <li>• Council establishes 2018 PIG to review oral and written comments and prepare discussion points for Council consideration</li> </ul>
October 2018	<ul style="list-style-type: none"> <li>• Council releases compilation of all written and oral comments for public review</li> <li>• 2018 PIG submits its report to the Council</li> </ul>
November 2018	<ul style="list-style-type: none"> <li>• Council adopts amendments to Version 1.0 based on public feedback during public hearings, which becomes Version 1.1</li> </ul>
December 2018	<ul style="list-style-type: none"> <li>• Council approves Version 1.1 with minor technical and clarifying amendments, which becomes Version 2.0, Final Proposed Rules</li> <li>• Council adopts official response to comments</li> </ul>
January 2019	<ul style="list-style-type: none"> <li>• Small Business Regulatory Review Board recommends to Governor to approve the Final Proposed Rules</li> </ul>
Spring 2019	<ul style="list-style-type: none"> <li>• Council submit the Final Proposed Rules to the Governor’s Office</li> <li>• Council and OEQC assist the public, agencies, and applicants with complying with the new rules should the Governor approve them into law</li> </ul>

## Genuine Progress Indicator: Holistic Indicator for Hawai‘i’s Environment

By Dr. Kirsten Oleson (University of Hawai‘i) and Dr. Regina Ostergaard-Klem (Hawai‘i Pacific University)

The Genuine Progress Indicator (GPI) is a holistic set of 26 economic, environmental, and social indicators used to track “good” things that are important to us (like leisure time) as well as “bad” things that are undesirable (like pollution) not captured in traditional measures of economic prosperity such as gross domestic product (GDP). GDP counts only those final goods and services that are sold in an economy while GPI goes further by incorporating benefits we receive from the environment or society that can’t be bought or sold in the market yet nevertheless contribute to our well-being. GPI also accounts for incidental costs such as pollution externalities, ecosystem degradation, and income inequality.

From our initial efforts in 2014 to build a GPI for Hawai‘i, we learned that the standard GPI framework provides an excellent foundation, but we need to focus more on localizing it for our island setting. The following is a summary of what was new for GPI over the last year as we continue to reach out to the community and localize the framework to the Hawai‘i context.

### **Aloha + Dashboard**

We are excited that GPI has been included on the Aloha + Dashboard as an economic prosperity indicator under the goal of Smart Sustainable Communities. Much of the data that GPI tracks as well as many of the underlying principles, are complementary to those of Aloha + Challenge and its companion goals of the UN Sustainable Development Goals (SDGs). In the cases in which GPI indicators overlap with SDG indicators (e.g., SDG #4 Quality Education; SDG #10 Reduced Inequalities; SDG #14 Life Below Water), GPI efforts can help inform the process of localizing the SDGs to Hawai‘i. A link to the Aloha + Dashboard is here: <https://dashboard.hawaii.gov/en/stat/goals/5xhf-begg/ezet-axai/xyz-jyd3>.

### **GPI and Income Inequality**

One of the economic indicators within the GPI framework is income inequality, used to gauge how evenly earnings are distributed among households or individuals within a population. Levels of income inequality may impact other factors within a society such as health, innovation, economic growth, income mobility, carbon emissions, and happiness and subjective well-being. Several compelling studies show lessons that may be relevant to Hawai‘i. Studies of economies with reliance on tourism showed that increased growth in those economic sectors tend to worsen local income equality and commodify traditional culture. Rising income inequality caused worsening rental affordability for low-income tenant households in a study of large American metropolitan areas. Other studies model how poorer people are more vulnerable to climate change impacts than the rest of the population. Closer to home, a report cited by the Hawaii Budget and Policy Center finds that Hawai‘i’s tax system exacerbates Inequality.

The standard GPI framework tracks income disparity within a population using the most common indicator of income inequality -- the Gini coefficient. Possible values for the Gini coefficient range from 0 (indicating that income is earned equally by everyone) to 1 (indicating all income is earned by a single person). The Gini coefficient for the state of Hawai‘i for 2017 is .446, following a general upward trend in levels of inequality since 1950. However, Hawai‘i’s Gini coefficient still remains below the national average of .482 and is the fifth lowest of all 50 states and DC. Nevertheless, as we noted in our original

work, this measure might be problematic when applied to Hawai‘i as it has a downward bias in small populations. Because Hawai‘i has a small population relative to other states, with even smaller subpopulations on the outer islands, we are currently assessing other measures that might better capture income inequality and its related impacts in Hawai‘i.

So if not the Gini coefficient, then what other measure(s) might we pursue? Our initial review of the literature uncovered a variety of other methods. One approach is to look at shares of income. A recent study, for example, shows that income shares to the top 1% in Hawai‘i nearly doubled from 1978 to 2015, from 6.8% to 12.2%. Another approach compares percentile ratios. The Palma ratio, for example, takes the richest 10% of the population’s share divided by the poorest 40% of the population’s share. A third approach uses one-number summary statistics such as the Gini, and include the Atkinson and Robin Hood indices. But unlike Gini, the Atkinson index includes a special parameter to capture society’s preference for equality, and puts more weight on the lower levels of income distribution accordingly. The Robin Hood index was aptly named; it approximates the total income that needs to be transferred from above average households to those below average such that equality in the distribution of incomes would be achieved.

While all of these options are interesting and thought provoking, no alternative measure immediately and clearly stands out. As we move forward, we will continue to look further into what the patterns in the distribution of income in Hawai‘i can tell us about our state, now and in the future, in relation to sustainability. The next steps will be to define the criteria to find an alternative, or possibly supplemental, indicator of income inequality that will be appropriate and feasible for GPI in Hawai‘i.

### **Filling in GPI Gaps Through Water Accounting**

Within its set of environmental indicators, the GPI tracks changes in the quantity of several types of natural capital (such as wetlands, farmlands, and forests) as well as changes in the quality in others (water pollution and air pollution for example). Arguably, water is one of the most critical depletable resources in our isolated islands. We noted in our previous work that GPI needs to be expanded to include costs of water pollution and depletion more broadly, across freshwater streams, coastal waters, and groundwater, to better reflect the role of water in Hawai‘i. As we further refine the framework, we are identifying research efforts related to the quantity and quality of water resources that can add value to GPI for Hawai‘i.

The first step to include any natural capital in GPI is to quantify the amount of the resource being extracted each year, followed by assigning an economic value to the depletion. Another complicating feature of water is that quality matters. Contamination in all types of water sources can render them unusable, so GPI needs to include the costs of pollution beyond that of just surface water and streams. Completing these steps for water, however, is not so straightforward. So to more accurately assess water as a natural asset within GPI, we require annual data on the amount of water used, the amount of water replenished, quality changes, and costs.

A recent University of Hawai‘i-led project on water accounting aims to synthesize data on water resources and use around the state, with the eventual goal of inventorying and assessing the stocks and flows of freshwater in Hawai‘i’s natural systems and human economy. The proof of concept focused on compiling the physical water accounts for the island of Oahu, gathering data from USGS, DLNR-CWRM,



DLNR-DOFAW, DOH-CWB, DOH-SDWB, DOA, and Honolulu BWS, among others, on water sources and uses. The project also developed an accounting template to track water's physical supply and use from different sources (e.g., surface water, groundwater, oceans), disaggregated by different user types (e.g., municipal, industrial, agriculture). Ultimately, a water account catalogs the quantity and, in some cases, quality of return flows to the environment. Advanced water accounts can also include physical and monetary asset values for water bodies like aquifers. Water that flows *between* economic sectors (e.g., municipal, agricultural, energy production, industry, environment) can also be tracked – illustrating how water adds value to different economic sectors. In general, water accounts show recent historical trends in water availability, use, and quality, and their impacts on the economy, allowing decision makers to more proactively evaluate emerging threats to water security. Data from this project could be leveraged to fill in the water gap in GPI by offering a more complex view of water's value to society.

### **GPI: Barriers and Opportunities**

Also this year we considered key barriers and opportunities to moving GPI forward for the state of Hawai'i by analyzing how three other states (Maryland, Vermont and Minnesota) are working to apply the GPI as a policy tool. The implementation efforts across these three states indicated two possible courses of action to further GPI: legislative and grassroots. The legislative approach seeks to put GPI into law as a means to influence policy creation. Furthermore, GPI developers going down this path should secure long-term funding as well as designate a committee that is responsible for ensuring that GPI is computed and applied properly. The second option is intended for the GPI to have foundation in a grassroots movement and to be supported by a non-governmental organization (NGO) (Fox, 2017; Hayden, Segundo). The purpose of this is to conceptually influence the community, thereby motivating the people to drive its implementation via the legislative process to influence the creation of policy (Segundo 2017). By utilizing these guidelines, the GPI can have a holistic influence on policy and improve environmental, social and economic outcomes in the state. These experiences provide lessons for Hawai'i to evaluate how the GPI can adequately capture the substance of the state's sustainability issues and offer insight for further localization that may be needed.

## Biosecurity & Invasive Species

By Dr. Joshua Atwood, Department of Land and Natural Resources

A recent study found that Hawai‘i is one of the top (if not the top) global invasion hotspots (Dawson et al. 2017). Part of the explanation for this unfortunate distinction lies in Hawai‘i’s creation. As Hawai‘i’s volcanic islands rose from the sea, they constituted some of the most remote landmasses on the planet. Over Hawai‘i’s 70M-year geologic history, the arrival of new species via wind, waves, or on the wings of birds was an extremely rare event. Many species that arrived in Hawai‘i evolved over time into unique species found nowhere else in the world. Contrasted against this long period of isolation is Hawai‘i’s current position in the world: a tourism destination and trade hub for the Pacific hosting 1.4M residents and, in 2016, 8.9M visitors. Humans arriving in Hawai‘i have brought with them an astonishing array of non-native species. These introductions can have huge impacts, not only on Hawai‘i’s ecosystems but on our local agriculture, our human health, and way of life in Hawai‘i.

To deal with the problem of invasive species, the State of Hawai‘i has invested heavily in biosecurity (i.e., the set of policies and actions taken to mitigate impacts from invasive species). Hawai‘i’s biosecurity programs are based within state agencies that have a mandate to deal with a particular subject area connected to invasive species. For example, the Hawai‘i Department of Agriculture (HDOA) deals with pre-border compliance agreements for commodity shipments as well as border inspection and post-border response to agricultural pests. The Department of Land and Natural Resources (DLNR) controls invasive species that have entered our marine environment and our forested watersheds. The Department of Health (DOH) controls invasive species that are also vectors of human diseases, such as mosquitoes and rodents. The Department of Transportation (DOT) mitigates invasives associated with airports, highways, and harbors, and the Department of Business, Economic Development, and Tourism deals with invasive species associated with coastal zones and economic damages. The University of Hawai‘i hosts a breadth of research expertise dealing with invasive species as well as the capacity to undertake cooperative projects. The Hawaii Invasive Species Council (HISC) is an interagency board comprised of the directors or designees of the six aforementioned state agencies that deal with particular portions of the invasive species problem. The HISC coordinates cross-department policy on invasive species issues and funds an interagency spending plan designed to fill gaps between existing agency programs.

Despite efforts to coordinate across agency resources, substantial gaps remain in Hawai‘i’s biosecurity infrastructure. The State of Hawai‘i recently underwent a comprehensive planning process to identify policy and process needs across all state agencies. The resulting Hawaii Interagency Biosecurity Plan (HIBP) identifies roughly 150 actions to strengthen biosecurity in Hawai‘i. Each action is assigned a lead agency, an estimated cost, and an intended timeframe for implementation between 2017 and 2027. Key goals of the HIBP include:

- Doubling the capacity at HDOA Plant Quarantine to detect and intercept invasive species in incoming cargo, and building new technologies such as electronic manifesting and transitional inspection facilities to make this work more effective
- Building a new biological control facility at HDOA to develop cost-effective biocontrol agents for established invasive species, and increasing staff capacity at the HDOA Plant Pest Control Branch

- Fully restoring the DOH Vector Control Branch (currently underway) and supporting efforts to develop and implement landscape-scale mosquito control
- Developing ballast water and biofouling policies at the DLNR Division of Aquatic Resources (DAR), identifying tools for safe in-water vessel cleaning, and building permanent capacity at DLNR DAR to mitigate aquatic invasive species impacts
- Developing a network of invasive species technicians at the DLNR Division of Forestry and Wildlife to detect and control invasive species in protected areas
- Better coordination across agencies by increasing funding for the HISC and the Watershed Partnerships Program, and through emergency response funding and planning
- Building programmatic stability for the UH Invasive Species Committees and Hawaii Ant Lab, projects of the UH Pacific Cooperative Studies Unit.

The full set of HIBP recommendations can be found at <http://dlnr.hawaii.gov/hisc/plans/hibp/>.

The HIBP includes recommendations for public engagement and action. New tools for public awareness are currently being developed, including public service announcements and online engagement programs. At present the public can take action in mitigating the impacts of invasive species in a variety of ways:

- The public can report invasive species sightings through the 643-PEST telephone hotline or through the new <http://643pest.org> website and 643PEST mobile app on iOS and Android.
- Volunteer opportunities to control invasive species are listed at <http://conservationconnections.org>.
- Residents with yards or gardens can learn about smart planting choices at <http://plantpono.org>.
- Connect with local Invasive Species Committees on each island via <http://hawaiiinvasivespecies.org>.
- Participate in the implementation of HIBP recommendations during the legislative session, at <http://capitol.hawaii.gov>.
- Sign up for the HISC Newsletter and learn more at <http://hisc.hawaii.gov>.

In July 2018, Governor Ige became the Chair of the Western Governors' Association (WGA). The WGA is comprised of the leaders of 19 states west of the Mississippi as well as Guam, the Commonwealth of the Northern Marianas Islands, and American Samoa. The chair of the WGA selects an initiative on which all western states and territories collaborate over the coming years. Governor Ige selected invasive species as his initiative.

Governor Ige highlighted two areas for biosecurity in which Hawai'i can serve as a leader:

- Develop techniques to combat invasive mosquitoes on a landscape scale.
- Create a Pacific Regional Biological Control Research Center.

The full video of Governor Ige's keynote address can be found online, along with the other panel videos and presentations:

<http://westgov.org/news/watch-livestream-biosecurity-and-invasive-species-initiative-workshop-in-hawaii/>

## Publications of EAs and EISs in *The Environmental Notice*

OEQC publication data is still being finalized. This section will present the information in a similar format to how the 2017 report presented it.

The OEQC publishes EAs, EISs, and other environmental review documents on the 8th and 23rd of each month, per statutory and administrative requirement.

Tracking a project or program (which are considered "an action" by the statute) as it goes through environmental review can range from straightforward to complex. Most actions are EAs that have a draft and final and then are finished. In the case of a typical EA, the OEQC counts the action itself as 1 (referred to as "unique") and the draft and final publications as 2, because it is the same action published twice (draft and final). For EISs, typically one action has 3-4 publications (preparation notice, draft, final, and acceptance).

Counting becomes more complex when an action changes over time or repeats steps in the process. For example, an action may be republished as a draft EAs to give the public more opportunity to comment. OEQC counts this as 1 action and 3 publications (draft, republished draft, and final).

The four tables included here show the distribution of unique actions based on stage of the process, location, and agencies.

Table 1 shows the total publications by stage of the process. This year OEQC published 181 entries in *The Environmental Notice*.

Table 1. Total Publications (Agencies and Applicants)

Document/Determination	2018	2017
Draft EA	75	58
Final EA	64	58
EIS Preparation Notice	10	19
Draft EIS	10	8
Final EIS	9	8
EIS Acceptance	7	4
EIS Non-acceptance	0	1
Supplemental EIS Required	1	1
No Supplemental EIS Required	1	1
Withdrawal	3	6
Other	1	0
<b>Total Publications</b>	<b>181</b>	<b>164</b>

Table 2 shows how many unique projects and programs are done by island. The statewide category is for actions that occur across the state. For 2018, 122 unique actions underwent review.

Table 2. Unique Actions by Island (Agencies and Applicants)

Island	2018	2017
Statewide	1	1
Hawai'i	22	20
Kaua'i	16	15
Lāna'i	1	1
Maui	20	26
Moloka'i	6	3
O'ahu	56	51
<b>Total Unique Actions</b>	<b>122</b>	<b>117</b>

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Table 3 shows which state and county agencies proposed actions and how many each proposed. Table 3 orders the proposing agencies by jurisdiction then alphabetically.

Table 3. Unique Agency Actions

Jurisdiction and Proposing Agency	2018	2017
<b>State of Hawai'i</b>	<b>43</b>	<b>39</b>
Agribusiness Development Corporation	1	1
Department of Accounting and General Services	2	2
Department of Education	9	7
Department of Hawaiian Home Lands	5	3
Department of Land and Natural Resources	9	10
Department of Transportation	12	11
Hawai'i Housing and Finance Development Corporation	0	1
Hawai'i Public Housing Authority	2	2
Natural Energy Laboratory of Hawai'i Authority	1	0
University of Hawai'i	2	1
Volcano School of Arts and Sciences	0	1
<b>City and County of Honolulu</b>	<b>12</b>	<b>17</b>
Board of Water Supply	2	3
Department of Design and Construction	6	6
Department of Environmental Services	2	6
Department of Facility Maintenance	1	1
Department of Land Management	1	0
Department of Planning and Permitting	0	1
<b>Hawai'i County</b>	<b>4</b>	<b>6</b>
Department of Environmental Management	3	3
Department of Public Works	0	2
Department of Water Supply	1	1
<b>Kaua'i County</b>	<b>6</b>	<b>4</b>
Department of Public Works	3	3
Department of Water	2	0
Fire Department	0	1
Housing Agency	1	0
<b>Maui County</b>	<b>4</b>	<b>5</b>
Department of Environmental Management	2	0
Department of Management	1	0
Department of Public Works	1	4
Department of Water Supply	0	1
<b>Total Unique Agency Actions</b>	<b>69</b>	<b>71</b>

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Table 4 shows which state and county agencies were responsible for applicants going through environmental review and how many unique projects and programs they oversaw. Table 3 orders the approving agencies by jurisdiction then alphabetically.

Table 4. Unique Applicant Actions by Approving Agency

Jurisdiction and Approving Agency	2018	2017
<b>State of Hawai'i</b>	<b>31</b>	<b>28</b>
Department of Business, Economic Development, and Tourism	1	0
Department of Hawaiian Home Lands	2	0
Department of Health	0	1
Department of Land and Natural Resources	18	14
Department of Transportation	2	3
Hawai'i Community Development Authority	1	1
Hawai'i Housing and Finance Development Corporation	4	4
Land Use Commission	2	5
Natural Energy Laboratory of Hawai'i Authority	1	0
<b>City and County of Honolulu</b>	<b>13</b>	<b>7</b>
Department of Environmental Services	1	0
Department of Planning and Permitting	12	7
<b>Hawai'i County</b>	<b>5</b>	<b>4</b>
Department of Parks and Recreation	1	0
Planning Department	4	4
<b>Kaua'i County</b>	<b>1</b>	<b>1</b>
Housing Agency	1	0
Planning Department	0	1
<b>Maui County</b>	<b>3</b>	<b>6</b>
Department of Environmental Management	1	1
Department of Housing and Human Concerns	0	1
Department of Public Works	0	1
Planning Department	1	3
Maui Planning Commission	1	0
<b>Total Unique Applicant Actions</b>	<b>53</b>	<b>46</b>

The OEQC continues to improve its internal data collection and tracking. Each of the tables shows 2017 data for comparison. In the future, the OEQC will be able to include more of a time series to provide a better sense of activity over time.

## Environmental Council Members

**Puananionaona “Onaona”  
Thoene (Chair)**



O‘ahu  
Term expires 6/30/2019

Puananionaona P. Thoene was born on O‘ahu and raised in Hilo. She is a graduate of the Kamehameha Schools, Kapālama Campus. Onaona received her J.D., magna cum laude, from the University of Hawai‘i at Mānoa, William S. Richardson School of Law with certificates in environmental law and native Hawaiian law, and a B.B.A., cum laude, from the University of San Diego. Onaona is a sixth year associate at Carlsmith Ball LLP in the Honolulu office. Her practice focuses on real property, environmental, business and corporate law, land use, and administrative law. She is also a member of the O‘ahu Island Advisory Council for the Hawaiian Islands Land Trust.

**Mary Begier  
(Vice Chair)**



Hawai‘i  
Term expires 6/30/2019

Mary Begier is principal broker and owner of Mary Begier Realty, with offices both on O‘ahu and Hawai‘i Island. She is a past president of both the Hawai‘i Island Realtors (HIR) and Honolulu Board of Realtors and has 36 years of experience selling real estate across the Hawaiian Islands. She represented HIR on the Big Island Business Council, where she served as president from 2002-2003. She is also a past president of the Rotary Club of Hilo Bay for 2008-09 and the Hawai‘i Island Chamber of Commerce 2009-2010. Begier served in the United States Navy, going to schools in Florida and California before being assigned to Honolulu. She served 8 years on The Hawaii State Foundation on Culture and the Arts including one year as chair and has represented Hawai‘i Island Chamber of Commerce on the Big Island Housing Foundation board. Begier prides herself in building coalitions between other business and community organizations to strengthen the ability to accomplish smart goals in the community. This brought about recognition from DLNR/HISC as Community Hero for work performed eradicating invasive weeds on Mauna Kea.

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**Roy Abe**



O‘ahu  
Term expires 6/30/2020

Roy is a life-long Hawai‘i resident who attended Kaimukī High School and received a B.S. degree in Civil Engineering from University of Hawai‘i. He has a Master’s of Science in Civil and Environmental Engineering from the University of California, Berkeley. He is a licensed civil engineer who has completed many challenging wastewater, water and infrastructure projects during a 35-year career as a consulting engineer specializing in sanitary engineering. Roy, who is a Vice President and Senior Project Manager at HDR, Inc., transitioned to part-time retired status in 2015. He continues to be actively involved in the Hawai‘i Water Environment Association, the local affiliate of the Water Environment Federation. Roy enjoys talking to anyone about sewers, sewage pump stations, sewage treatment plants and any other topic related to sewage. He is passionate about obtaining the most “bang-for-the-buck” from our precious pollution control dollars by making rational science-based decisions.

**Stephanie Dunbar-Co**



Moloka‘i  
Term expires 6/30/2022

Steph Dunbar-Co works for The Nature Conservancy, Moloka‘i Program. As the East Slope Project Manager, Steph oversees activities in southeastern (Mana‘e) Moloka‘i where she lives, was raised, and is a fifth generation landowner. Steph received MS and PhD degrees in Botany from the University of Hawai‘i, focusing on the evolution, ecology, and conservation of the native Hawaiian flora. Her education and background have aligned to focus her efforts on the conservation of native ecosystems, long-term fresh water supply, and sustainable agriculture. She lives with her husband and two young children on her family’s ranch in Kainalu, Moloka‘i.

**Scott Glenn (Ex Officio Member)**






O‘ahu  
Term expires 6/30/2019

Scott serves as the Director of the Office of Environmental Quality Control (OEQC) and is an *ex officio* member of the Council. He has served on the Council since 2011, including as Chair of the Council in 2013. Scott is the Co-Chair of Governor Ige’s Sustainable Hawai‘i Initiative and liaison to the U.S. Climate Alliance. He serves on the Greenhouse Gas Sequestration Task Force. Prior to coming to the OEQC, he worked as an environmental planner in the private sector. He received his Master’s Degree in Urban and Regional Planning from the University of Hawai‘i in 2009. Scott specializes in climate change policy, environmental review, and planning. As OEQC Director, he spearheaded the update to the administrative rules for the EIS process.




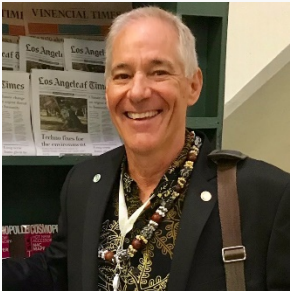
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<p><b>Maka'ala Ka'aumoana</b></p>  <p>Kaua'i Term expires 6/30/2019</p>	<p>Barbara "Maka'ala" Ka'aumoana was born in Kāne'ohe, Hawai'i in 1948. Educated throughout the Pacific and California, she pursued careers in both nursing and public school teaching before returning "home" in 1989. Always active in environmental education and conservation organizations and activities, she soon became involved in local projects supporting community management of cultural and environmental resources. In 1999 she was elected by the Hanalei community to head the newly formed Hanalei River Hui. Maka'ala believes in community participation and transparent process and has continued to guide this organization through the founding of the nonprofit, Hanalei Watershed Hui, and the development and implementation of the Hanalei Watershed Action Plan, the Targeted Watershed Initiative project, the Hanalei Makai Watch Program, Hanalei Watershed Management Plan, and the Hanalei to Hā'ena Disaster Resilience Plan. Maka'ala and her husband, a native Hawaiian, live on the north shore of Kaua'i, have a small banana farm, and enjoy fishing and family time.</p>
<p><b>P. Ka'anohi Kaleikini</b></p>  <p>O'ahu Term expires 6/30/2019</p>	<p>Paulette Ka'anohiokalani Kaleikini serves as a Lead Cultural Resource Monitor &amp; Manager and Native Hawaiian Cultural Advisor. Ms. Kaleikini has years of experience with Environmental Assessments and Environmental Impact Statements, including Archaeological Monitoring Plans, Archaeological Inventory Surveys, Archaeological Data Recovery Plans, Burial Treatment Plans, and Cultural Impact Assessments, in line with Section 106 of the National Historic Preservation Act and Native American Grave Protection and Repatriation Act.</p>
<p><b>I. Robin Kaye</b></p>  <p>Lāna'i Term expires 6/30/2020</p>	<p>In 1974, Robin and his wife moved to Lāna'i to document a threatened lifestyle as the island was facing a transition from a pineapple plantation economy to resort development. As a result of that effort, he published a photographic documentary called Lanai Folks. Shortly thereafter, Robin began a career in the arts and nonprofit sectors, working for the Hawai'i State Foundation on Culture and the Arts, the California Arts Council, the Pennsylvania Council on the Arts, and the Pittsburgh Cultural Trust. In 1992, he and a partner launched the management consulting firm of Dewey &amp; Kaye, Inc. (DKI), which worked with nonprofit organizations, foundations and government agencies. Robin's work with nonprofits involved board development, long range planning, and executive searches for foundation program staff and nonprofit</p>

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	<p>executive directors. Robin was one of the original founders of the Lanai Limu Restoration Project, and currently serves as spokesperson for Friends of Lana‘i. Robin recently co-created Lāna‘i Changes, a community development corporation dedicated to providing diversity in Lāna‘i’s economic future.</p>
<p><b>Theresita Kinnaman</b></p>  <p>Kaua‘i Term expires 6/30/2020</p>	<p>Theresita’s interest and service for the Council is due to her upbringing, during territorial and plantation days, when the environment and natural resources were fresh, plentiful, clean, and life was simple, fun, honest and about how we cared for the island’s land, ocean, streams, natural resources and not deplete these life sustaining resources. Today, with development of once open lands and spaces, land-based activities are straining the environment and natural resources. Her involvement in community service has spanned 30 plus years advocating for community needs pertaining to environmental, archeology, and natural resources, among other concerns; all that our sense of place, and identity to hopefully recharge and preserve for future generations to a highly sustainable level.</p>
<p><b>Robert Parsons</b></p>  <p>Maui Term expires 6/30/2022</p>	<p>Appointed in May 2015, Rob served 12 years as the Maui County Environmental Coordinator, a position first created by Mayor Alan Arakawa. He serves as liaison to county, state, and federal agencies and many non-profit conservation organizations, including watershed partnerships and Maui Invasive Species Committee. He also is the ad hoc Sustainability Liaison and is part of the Hawai‘i Green Growth Core and Measures Teams, supporting the goals of the Aloha + Challenge. Rob is a well-known free-lance writer and environmental advocate, with over 180 articles published since 2007. He is a 40-year Hawai‘i resident, originally from the Midwest, as is his wife Heather. “I feel it is essential to learn as much as I can about issues that affect us all, and share that information so people can make informed decisions as part of establishing a future with the ability to sustain ourselves and the multitude of other living species with whom we share this fragile planet.” Rob also chairs the Environmental Council Annual Report Committee.</p>

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**Charles Prentiss**



O‘ahu  
Term expires 6/30/2019

Chuck is a former city manager and retired city planner with the City and County of Honolulu. He holds degrees in economics, planning, and government management. He is a former Executive Secretary of the Honolulu City Planning Commission, a Vietnam veteran pilot, and a retired Lieutenant Colonel of the Hawai‘i National Guard. Chuck is also President of Hawai‘i’s Thousand Friends and Chairperson of the Kailua Neighborhood Board. Chuck possesses a strong belief in citizen participation in government. For him, “participation aids in government openness and honesty, and provides a countervailing force to special interests in government decisions. In Hawai‘i, the environment is our economy.”

**Ronald Terry**



Hawai‘i  
Term expires 6/30/2019

Ron Terry is a graduate of University of Hawai‘i Hilo and has a PhD from Louisiana State University. After five years as a professor of Geography at University of Hawai‘i Hilo, he started Geometrician Associates in 1992. He has worked solely or teamed with others to prepare nearly 500 environmental assessments, environmental impact statements, and biological reports for projects throughout the Hawaiian Islands. Clients include many federal, state and county agencies as well as private sector firms. He has served on three State boards and several non-profits. Married with two grown daughters, he also surfs, kayaks, travels, and plays senior softball.

**Michael Tulang**



Hawai‘i  
Term expires 6/30/2020

Mike entered the federal service in 1967 with U.S. Department of Agriculture, National Resource Services, serving in a variety of responsibilities. He was a Watershed Planning Economist, District Conservationist, Resource Conservation, and Developer Coordinator for Maui County, Hawai‘i County and the State of Hawai‘i. He retired after 31 ½ years of federal service and accepted an executive position with the State Association of Conservation Districts for 7 years. He then went on to serve for 2 years as a councilman on the Hawai‘i County Council, followed by 3 years of substitute teaching at his former elementary school. He has served his community as Director of the Boys and Girls Club and the Hawai‘i Agricultural Cooperative, as a Board Member of HIWEDO, and as a Certified Trainer at Positive Coaching. His hobbies include fishing, hunting, cattle ranching, and singing.

**N. Mahina Tuteur**



O‘ahu

Term expires 6/30/2022

Mahina Tuteur is currently a Post-Juris Doctor Fellow at the Ka Huli Ao Center for Excellence in Native Hawaiian Law. Raised on the windward side of O‘ahu, she graduated from the William S. Richardson School of Law in 2014 with certificates in Environmental and Native Hawaiian Law. She has worked on policy advocacy and natural resource management issues for various non-profit and government agencies, and has also worked in state and federal courts.

## OEQC Members

Bios to be included from the OEQC website unless OEQC staff provide more current information.

**Scott Glenn, Director**

Refer to bio above.

**Jennifer Ching, Secretary**

Jen has over 13 years working as a State employee. For the past 10 years, she held various positions within the Department of Health. In December 2018, she transferred from the Executive Office on Aging to the Office of Environmental Quality Control. She provides administrative support to the Office and the Environmental Council.

**Laura McIntyre, Planner**

Laura Leialoha McIntyre, MURP AICP has over 20 years of planning experience. From 2012 to 2018, Laura was the Program Manager for the Environmental Planning Office with the State of Hawai‘i Department of Health. Laura has completed various projects in five different countries. She has worked as a consultant in five different private planning firms, three in Hawai‘i and two in Australia. Laura also ran her own private planning firm between 1995-1998.

Laura was born and raised in Hawai‘i and received her master’s degree in Urban and Regional Planning (MURP) from the University of Hawai‘i. She received her undergraduate degree in Economics and Political Science from the University of California, Irvine. Laura has been an executive committee member of the Hawai‘i American Planning Association since 2013 and has been a member of the American Institute of Certified Planners (AICP) since 2010. Over the years, Laura has presented on a number of topics to a wide range of audiences. Laura also holds certificates from the National Disaster Preparedness Training Center (FEMA) on Coastal Community Resilience and Emergency Preparedness & Response. Over the years, Laura has presented on a wide range of topics to various audiences.

**Tom Eisen, Planner**

Truthfully a geographer, Tom has been engaged with Hawai'i's planning community for over 25 years. Presently serving as a planner in the Office of Environmental Quality Control, Tom also has natural resource planning experience with the Coastal Zone Management Program and the Office of Conservation and Coastal Lands. His planning perspective has been broadened by employment with two county planning departments, as well as working as a sole proprietor consultant and with a large local planning firm. Preferring to surf and practice yoga in his free time, Tom has also been a Neighborhood Board & Community Garden Board member, volunteered as a docent at the Waikiki Aquarium, and built yurts, permaculture gardens, and photovoltaic systems.

**Leslie Segundo, Environmental Health Specialist**

After completing a baccalaureate in chemistry, Les worked with the Solid and Hazardous Waste Branch of the Department of Health for several years before transferring in 1991 to the Office of Environmental Quality Control. He continues to provide professional support for the Environmental Council and assists in the day-to-day operations of the Office.