WATER RESOURCES COMMITTEE

August 24, 2018

Committee Report No.

18-144

Honorable Chair and Members of the County Council County of Maui Wailuku, Maui, Hawaii

Chair and Members:

Your Water Resources Committee, having met on January 24, 2018, May 16, 2018, July 10, 2018, and August 1, 2018, makes reference to County Communication 15-50, from the Director of Water Supply, transmitting a proposed bill entitled "A BILL FOR AN ORDINANCE AMENDING TITLE 19, MAUI COUNTY CODE, TO ESTABLISH A WELLHEAD PROTECTION OVERLAY DISTRICT."

The purpose of the proposed bill is to establish a wellhead protection overlay district to protect the County's municipal wells from contamination and avoid costly treatment through the restriction of high-risk uses in the capture zones of Department of Water Supply drinking water wells.

Your Committee notes the Council's Water Resources Committee (2015-2017 Council term) met on March 4, 2015, September 30, 2015, and November 30, 2016.

At the request of the Chair of the Committee, the Department of the Corporation Counsel transmitted a proposed resolution, entitled "REFERRING TO THE LANAI, MAUI, AND MOLOKAI PLANNING COMMISSIONS A PROPOSED BILL AMENDING TITLE 19, MAUI COUNTY CODE, RELATING TO WELLHEAD PROTECTION," approved as to form and legality.

The purpose of the proposed resolution is to refer to the planning commissions a proposed bill amending Title 19, Maui County Code ("MCC"), to add a new chapter relating to wellhead protection.

Your Committee notes Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, require the appropriate planning commissions to review proposed land use ordinances and

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provide their findings and recommendations to the Council. As an amendment to Title 19, MCC, the proposed bill constitutes a proposed land use ordinance.

Your Committee further notes the proposed bill would affect Countywide land uses; therefore, review by all three planning commissions is appropriate and the commissions should review the proposed bill and provide their comments.

A representative from the Department of Water Supply said the proposed bill could reduce the Department's expenses for treating contaminated drinking water by preventing potential contamination events around County wellheads. While State and Federal governments provide regulations for wellhead protection, the representative said enforcement of these regulations is left to the counties, who can enforce through land use regulations.

The representative explained the proposed bill establishes a wellhead protection overlay district ("WPOD") consisting of three zones around County-owned wellheads. Zone A is a 50-foot zone immediately around wellheads in which only wellhead-related activities are allowed. Zone B and Zone C are larger zones surrounding wellheads and are designated based on travel times of various contaminants, as determined by the University of Hawaii Department of Geology and Geophysics.

The proposed bill requires wellhead protection permits for certain land uses to be conducted within Zones B and C. Other uses are prohibited. The representative said the WPOD supersedes the area's underlying zoning. If a use is permitted by the zoning but prohibited by the WPOD, then the use is prohibited unless it is an existing nonconforming use, which would still be allowed pursuant to Section 19.500.110, MCC.

Another representative from the Department said the Department would work with the Department of Planning to identify land uses within the WPOD that require a wellhead protection permit or are prohibited. Should a permit be required, the Department of Water Supply would

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ensure land use applicants implement the best management practices required by the proposed bill. Once the best management practices are implemented, the Department would issue the permit.

The representative said he anticipates the Department would issue approximately 20 wellhead protection permits a year.

At the request of the Chair of your Committee, the Department of the Corporation Counsel transmitted a revised proposed resolution, approved as to form and legality, incorporating revisions to the attached proposed bill. The revisions delete the appendices and remove references to the appendices within the bill. The maps entitled "Wellhead Protection Overlay District" and the document entitled "State of Hawaii Department of Agriculture List of Pesticides of Concern" are instead referenced in the proposed bill as being on file with the County Clerk.

The revisions also add wellhead protection permit requirements for the construction of three or more dwelling units on a single lot, parcel, or site in both Zone B and Zone C.

Your Committee expressed a desire to protect private wells that serve as public water systems, such as the wells run by the Lanai Water Company, through similar legislation. Your Committee noted the proposed bill is a first step to ensure County wellheads are protected. The WPOD may be expanded later to protect all public water systems.

Your Committee further revised the revised proposed resolution to also refer the proposed bill to the Board of Water Supply for its review and comments.

Your Committee voted 4-0 to recommend adoption of the further revised proposed resolution. Committee Chair Atay, Vice-Chair Cochran, and members Carroll and Crivello voted "aye." Committee members King, Sugimura, and White were excused.

Your Committee is in receipt of a further revised proposed resolution, approved as to form and legality by the Department of the

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Corporation Counsel, entitled "REFERRING TO THE MAUI, MOLOKAI, AND LANAI PLANNING COMMISSIONS AND THE BOARD OF WATER SUPPLY A PROPOSED BILL AMENDING TITLE 19, MAUI COUNTY CODE, RELATING TO WELLHEAD PROTECTION," incorporating your Committee's recommended revisions and nonsubstantive revisions.

Your Water Resources Committee RECOMMENDS that Resolution 16-140, attached hereto, entitled "REFERRING TO THE MAUI, MOLOKAI, AND LANAI PLANNING COMMISSIONS AND THE BOARD OF WATER SUPPLY A PROPOSED BILL AMENDING TITLE 19, MAUI COUNTY CODE, RELATING TO WELLHEAD PROTECTION," be ADOPTED.

This report is submitted in accordance with Rule 8 of the Rules of the Council.

ALIKA ATAY, Chair

wr:cr:18018aa:jgk

Resolution

No. 18-149

REFERRING TO THE MAUI, MOLOKAI, AND LANAI PLANNING COMMISSIONS AND THE BOARD OF WATER SUPPLY A PROPOSED BILL AMENDING TITLE 19, MAUI COUNTY CODE, RELATING TO WELLHEAD PROTECTION

WHEREAS, the Council is considering a proposed bill to amend Title 19, Maui County Code, to add a new Chapter 19.61, relating to a Wellhead Protection Overlay District; and

WHEREAS, Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended, require that the appropriate planning commissions review proposed land use ordinances and provide findings and recommendations to the Council; and

WHEREAS, the Council requests the Board of Water Supply also review the proposed bill and provide any findings and recommendations it may have to the Council; now, therefore,

BE IT RESOLVED by the Council of the County of Maui:

- 1. That it hereby refers the proposed bill, entitled "A BILL FOR AN ORDINANCE AMENDING TITLE 19, MAUI COUNTY CODE, TO ESTABLISH A WELLHEAD PROTECTION OVERLAY DISTRICT," a copy of which is attached hereto as Exhibit "A" and made a part hereof, to the Maui Planning Commission, the Molokai Planning Commission, and the Lanai Planning Commission, pursuant to Sections 8-8.4 and 8-8.6 of the Revised Charter of the County of Maui (1983), as amended; and
- 2. That it hereby also refers the proposed bill to the Board of Water Supply; and
- 3. That it respectfully requests that the Maui Planning Commission, the Molokai Planning Commission, the Lanai Planning Commission, and the Board of Water Supply

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- transmit their respective findings and recommendations to the Council as expeditiously as possible; and
- 4. That certified copies of this resolution be transmitted to the Mayor, the Acting Director of Water Supply, the Planning Director, the Maui Planning Commission, the Molokai Planning Commission, the Lanai Planning Commission, and the Board of Water Supply.

APPROVED AS TO FORM AND LEGALITY:

JENNIPER M.P.E. OANA
Deputy Corporation Counsel
County of Maui

LF#2017-0094

07/24/18 DRAFT

ORDINANCE NO	
BILL NO.	(2018)

A BILL FOR AN ORDINANCE AMENDING TITLE 19, MAUI COUNTY CODE, TO ESTABLISH A WELLHEAD PROTECTION OVERLAY DISTRICT

BE IT ORDAINED BY THE PEOPLE OF THE QUNTY OF MAUI:

SECTION 1. Title 19, Maui County Code, is amended by adding a new chapter to be appropriately designated and to read as follows:

"CHAPTER 19.61

WELLHEAD PROTECTION OVERLAY DISTRICT

Sections:

19.6	1.01	LØ Pu	rpose	and	intenf	

19.61.020

19.61.030

App cability.

Wells ad protection overlay district zones

gulations for Zone A. 9.61.050

19 51.060 Regulations for Zone B.

19.61.070 Regulations for Zone C.

19.61.080 Wellhead protection permits.

19.61.090 Best management practices.

19.61.10 Design guidelines.

19.61.110 Liability.

Interpretation of wellhead protection overlay district 19.61.120

zone boundaries.

19.61.130 Enforcement.

19.61.140 Administrative rules.

19.61.150 Severability.

19.61.010 Purpose and intent. Maui County recognizes that many residents rely on groundwater for their safe drinking water supply, and that certain land uses may contaminate

EXHIBIT "

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groundwater sources. To ensure the protection of these drinking water sources, this ordinance establishes a zoning overlay district to be known as the wellhead protection overlay district ("WPOD"). The purpose and intent of the WPOD is to:

Protect the public's health, welfare, and safety by

minimizing the risks of contamination of aquifers.

Preserve and protect existing and potential drinking water sources.

Implement land use policies consistent with the Maui

County general plan and community plans.

Restrict and prohibit land uses that are incompatible with groundwater protection.

The following definitions shall 19.61.020 Definitions. apply to this chapter. Terms not defined below shall have the meanings set forth in section 19.04.040 of this tele, unless the

context clearly indicates a different meaning:

"Animal feeding operation" means a lot or facility other than an aquatic animal production facility) where animals will be stabled or confined and fed or maintailed for a total of 45 days or more in any 12-month period, and when crops, vegetation forage growth, or post-harvest residues are not estained in the normal growing season over any potten of the lower facility. Pasture operations are not animal feeding perations.

"Contamination" means an in partner of water quality by one or more of the substances regulated under the United States Environmental Protection Agency National Primary Drinking Water Regulations or under the Rules Relating to Public Water Systems pursuant to Hawkii Administrative Rules Title 11, Chapter 20.

"Dump" means lawfully operated and privately-owned refuse disposal site.

"Ha ardon material" means substances that are identified as hazardous was a by the United States Environmental Protection Agency as set for in 40 Code of Federal Regulations Part 261 Subpart D. or designated a hazardous substance by the United States Environmental Protection Agency pursuant to 40 Code of Federal Regulations Part 302.

"Integrated pest management" means a decision-making process that considers cultural, mechanical, biological, and chemical controls of pests such as insects or rodents. mechanisms are selected as each situation warrants. chemical control is indicated, specific pest populations are targeted for treatment when they are most vulnerable rather than by general pesticide application.

"Landfill" means any sanitary landfill maintained and

operated by the County.

""Primary Containment Facility"" means a tank, pit, container, pipe, vessel, or area containing a liquid or chemical that is not a secondary containment facility.

"Public water system" means a water system which provides water for human consumption through pipes or other constructed conveyances if the system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least sixty days out of any twelve-month period, as defined in section 11-20-2 of the Hawaii Administrative Rules. Such term includes any collection treatment, storage, and distribution facility under control of the operator of such system; and any collection or pretreatment storage facility not under such control which is used primarily in connection with such system.

"Regulated substance" means a substance regulated under the United States Environmental Protection Agency National Primary Drinking Water Regulations or under the Rules Relating to Public Water Systems pursuant to Hawaii Aministrative Rules

Title 11, Chapter 20.

"Release" means any unplanned or unpermitted discharge, leak, or spill of a potential contaminant including a hazardous material.

"Secondary containment facility" means a second tank, catchment pit, pipe, or vessel that havits and contains liquid or chemicals leaking or leaching from a primary containment facility.

"Sewage sludge" means any solid, seni-solid, or liquid waste generated from a municipal, emmercial, or industrial wastewater treatment plant, water supply treatment plant, industrial process, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

"Subdivision" means a subdivision as defined in title 14,

article 1, of this code.

"Time-of-travel distance" of "TOT distance" means the distance that groundware will travel in a specified time. This distance is generally a function of the permeability and slope of the aquifer.

"Wellhead protection overlay district" or "WPOD" means the zoning district consisting of the surface and subsurface areas surrounding a water well or well field that are regulated to prevent contaminants from reaching the water well or well field, as identified on the maps entitled "Wellhead Protection Overlay District," on the in the office of the county clerk with certified copies being placed on file in the department of planning and the department of water supply. The maps shall be deemed to accompany, and are made a part of, the ordinance codified in this title, and may be amended in the same manner as any part of this title.

19.61.030 Applicability. This ordinance shall apply to wellhead protection overlay district zones as defined herein for department of water supply wells, and not to private wells. Nonconforming uses as defined in section 19.04.040 of this title are subject to the provisions of section 19.500.110 of this title.

- 19.61.040 Wellhead protection overlay district zones and maps. A. WPOD zones are delineated by the University of Hawaii Department of Geology and Geophysics utilizing a fixed distance for Zone A nearest to the well, and TOT distance criteria for Zones B and C using the United States Geological Survey threedimensional numerical groundwater model MODFLOW followed by a particle tracking program MODPATH. Zone B is intended to designate a conservative estimate of the area that may contribute bacteria and viruses to the wellhead. A two-year TOT criterion is based on survival times for bacteria and viruses in soil and Zone C is based on a ten-year TOT to allow groundwater. sufficient time to implement management and remedial measures to mitigate contamination from accidental contaminant spills and other causes.
- The WPOD zones are superimpos on all current B. zoning districts and identified on the maps enabled "Wellhead Protection Overlay District."
- C. The WPOD zones are designated as follows with Zone A being the most restrictive and Zone being the least restrictive:

 1. Zone A 50-foot direct hemical contamination zone. Zone A is defined as the fixed 50-foot radius around each well. The purpose of this zone is to provide protection from vandalism, tampering or other threats at a well site.
 - 2. Zone B Indirect microbial contamination zone. Zone B consists of the surface and subsurface area overlying the portion of an aquifer that contributes water to the well within two years
 - 3. Zone Indirect chemical contamination zone. Zone C consists of the surface and subsurface area overlying the portion of an injer that contributes water to the well within ten year
- 19.61.050 Regulations for Zone A. Within Zone A, necessary public ulities and facilities shall be permitted uses, including the construction, operations, maintenance, repair, and enlargement of drinking water supply-related facilities such as wells, pipelines, adueducts, and tunnels. All other uses are prohibited. No wellhead protection permits shall be issued for parcels within **5**0ne A.
- 19.61.060 Regulations for Zone B. A. Within Zone B, all uses permitted in the underlying zoning districts shall be permitted, unless a wellhead protection permit is required pursuant to subsection B of this section, or a use is prohibited by subsection C.
- Permit required. The following uses in Zone B shall require a wellhead protection permit issued by the director of water supply pursuant to section 19.61.080:
 - Commercial automobile body or commercial automobile repair shops.

2. Car washes.

3. Cement or concrete plants.

Petroleum or mixed-biofuel fueling stations. 4.

5. Fleet, trucking, or bus terminals.

- 6. Dry cleaners.
- The use of pesticides rated by the United States Environmental Protection Agency as having high leachability potential, as identified on the document entitled "State of Hawaii Department of Agriculture List of Pesticides of Concern," with current copies on file with the department of water supply. This document, as may be amended by the State Department of Agriculture from time to time, shall be deemed to accompany the ordinance codified in this title, as may be amended, and is made a part of the ordinance.

Commercial machine shops.

Commercial wood preserving or treatment facilities. 9.

Animal feeding operations. 10.

11. Commercial equipment maintenance or fueling areas.

> 12. Hospitals.

Paved and unpaved parking lots with more than 20 13. parking spaces.

14.

Waste transfer or recycling stations.
Any collection, handling, manufacture, use, 15. storage, transfer, or disposal of more than fifty-five gallons of petroleum products or more than ten gallons of any other regulated substance as defined herein.

16. Subdivisions that create four

developable lots.

17. Construction of three or more dwelling units on a single lot, parcel, or site.

Prohibited uses. The following uses are prohibited within Zone B:

- Commercial electrical or electronic manufacturing facilities that utilize a regulated substance as defined herein
 - Mortuaries or graveyards.

Golf courses.

- 4. Commercial 4. Commercial metal plating, finishing, or fabricating facilities that utilize a regulated substance as defined herein.
- Commercial chemical processing or storage 5. facilities.
- Commercial plastics or synthetic production facilities that utilize a regulated substance as defined herein.
 - 7. Commercial junk, scrap, or salvage yards.
 - 8.

9. Landfills or dumps.

Injection wells, dry wells, or sumps on non-10. residential properties.

- 11. Irrigation with reclaimed wastewater classes R-2 and R-3.
 - 12. Sewage sludge land applications.
 - 13. Commercial slaughterhouses.
 - 14. Wastewater percolation ponds.
- 19.61.070 Regulations for Zone C. A. Within Zone C, all uses permitted in the underlying zoning districts shall be permitted, unless a wellhead protection permit is required pursuant to subsection B of this section, or a use is prohibited by subsection C.
- Permit required. The following uses in Zone C shall В. require a wellhead protection permit issued by the director of water supply pursuant to section 19.61.080:
 - Commercial automobile body a repair shops. 1.
 - Petroleum or mixed-biofuel fueling stations. 2.
 - 3. Fleet, trucking, or bus terminals.
 - 4. Dry cleaners.
 - 5. Golf courses.
 - Commercial machine sho 6.
 - 7. Commercial wood preserving or treatment facilities.
 - 8.
 - Animal feeding operations.

 Commercial equipment maintenance or fueling 9. areas.
 - 10. Any collection, handing, manufacture, use, storage, transfer or disposal of more than fifty-five gallons of petroleum roducts or more than ten gallons of any other regulated substance as defined herein.
 - bdivisions that create four or more developable lots
 - Construction of three or more dwelling units on single lot, parcel, write.

Prohibited uses. The following uses are prohibited e C: within Zon

- Commercial electrical electronic or manufacturing facilities that utilize a regulated substance as defined h
- Commercial chemical processing or storage facilities.
- Commercial plastics or synthetic production 3. facilities that utilize a regulated substance as defined herein.
 - Commercial junk, scrap, or salvage yards.
- Commercial metal plating, finishing, fabricating facilities that utilize a regulated substance as defined herein.
 - 6. Mines.
 - 7. Landfills or dumps.
- Injection wells, dry wells, or sumps on nonresidential properties.

9. Wastewater percolation ponds.

19.61.080 Wellhead protection permits.

Wellhead protection permit applications shall be submitted to the director of water supply and shall include:

The name, address, and phone number of the applicant who will be responsible for implementation of best

management practices.

Verification \mathbf{of} property ownership authorization by all property owners if the applicant is not the sole owner of the subject property.

The tax map key of the project site.

A plot plan showing the project location on the

parcel.

5. A description of the proposed use, including names and quantities of any regulated substances collected, handled, manufactured, used stored, transferred, disposed of at the project site.

6. A best management practices plan addressing all activities subject to the wellhead protection permit.

Additional information as may be requested by the director of water supply.

B. Permit processing

1. Upon receipt of a complete application, the director of water supply shall approve or deny the application pursuant to the requirements of this chapter, and may impose conditions upon the proposed use to ensure that the proposed and interval of this chapter are most life. that the purpose and intent of this chapter are met. If a complete application does not meet the requirements of this chapter, it shall be desired.

An initial permit shall be valid for a period of up

to five years. Subsequent permit renewals and permit amendments may be granted by the director of water supply for longer duration. In reviewing applications for renewals, the director of water supply shall require evidence of compliance with applicable best management practices and

any other permit conditions.

All permits and renewals shall contain a provision for inspection at reasonable times and upon

presentation of appropriate credentials.

Revocation and appeal. A wellhead protection permit may be revoked at any time and an application for permit renewal may be denied by the director of water supply if the permit terms and conditions have been violated or if the requirements of this chapter have not been met. Appeals of permit denials, revocations, or non-renewals, or alleging errors, shall be heard and determined by the board of variances and appeals pursuant to chapter 19.520 of this title.

19.61.090 Best management practices. The following standards shall apply to uses in Zones B and C of any WPOD:

Any collection, handling, manufacture, use, storage, transfer, or disposal of more than fifty-five gallons of petroleum products or more than ten gallons of any regulated substance as defined herein, must have a secondary containment facility which shall be easily inspected and whose purpose is to intercept any leak or release from the primary containment facility.

An animal feeding operation shall meet the minimum requirements for operation set forth in the "Guidelines for Livestock Waste Management" prepared by the University of Hawaii at Manoa Cooperative Extension Service, College of Tropical Agriculture and Human Resources, dated January 19, 2010, as

may be amended.

C. The irrigation of crops shall ollow integrated pest management in accordance with the United State Department of Agriculture Natural Resources Conservation Service Technical Guide dated 1989, as may be amended.

D. Subdivisions that create four or more developable lots in unsewered areas that serve more than the residential unit per acre shall install aerobic treatment units or alternative treatment units achieving equal or higher level of was ewater treatment than aerobic treatment units.

Parking lots shall be aintained on a yearly basis, including cleaning catch basins, and seeping and sealing cracks. Runoff from parking lots shall be diverted to storm water drains.

Waste massfer or recycling stations shall have an

operating manual to ensure that only clean, marketable recyclables are collected. Storage of residuals shall be accomplished to pre-entirely and leaking.

G. Golf course development shall meet best management practices for use of numerous and pesticides as set forth in "Golf Course Management Wessure," Hawaii's Coastal Nonpoint Pollution Control Regram Management Plan, dated June 1996, as may be assended may be amended.

Construction activities shall be in accordance with

chapter 20.03 of this code and the following standards:

I There shall be a designated person on site during construction activities who shall be responsible for supervising the use, storage, and handling of hazardous material and who shall take appropriate mitigating actions necessary in the event of fire or spill.

Hazardous materials left on site when the site is unsupervised must be inaccessible to the public. Locked storage sheds, locked fencing, locked fuel tanks on construction vehicles, or other techniques may be used if

they will prevent access.

Construction vehicles and stationary equipment that are found to be leaking fuel, hydraulic fluid, or other hazardous materials shall be removed from the site and from

any wellhead protection overlay district zone. The vehicle or equipment may be repaired in place, provided the leakage is completely contained.

Hazardous materials shall not be allowed to

enter stormwater systems.

19.61.100 Design guidelines. Upon issuance of the appropriate wellhead protection permit for parcels in Zone B or C, the following design guidelines shall apply to subdivisions that create four or more developable lots, and to the construction of three or more dwelling units on a single lot, parcel, or site:

Proposed development and uses shall be located as far

from the wellhead as feasible.

Storm-water infiltration basins shall be located outside the WPOD where feasible, provided that if this is not feasible, then the basins shall be located as far from the wellhead as feasible.

3. Active parks and schools shall implement integrated

pest management.

- 4. If a development or use is proposed on property which is partially within a WPOD, the proposed development or use shall be located to the maximum extent feasible on the portion of the property that is outside the WPOD.
- 19.61.110 Liability. Nothing in this ordinance shall be construed to imply that the County has accepted any of an owner or developer's liability if a permitted facility or use contaminates groundwater in any aquifer.

19.61.120 Interpretation of wellhead protection overlay

A. If parts of a parcel lie within one or more of the delineated zones of the WPOD, each part shall be governed by the restrictions applicable to the zone in which the part is located.

Where the boundary between two WPOD zones passes through a facility, the entire facility shall be considered in the more

- restrictive one.

 C. Where a facility, or portion thereof, is overlapped by delineated WROD zones of different wells or well fields, the more restrictive zone shall apply.
- 19.61.130 Enforcement. Any violation of this chapter shall be enforced pursuant to chapter 19.530 of this title, and through revocation or non-renewal as prescribed herein.
- **19.61.140** Administrative rules. The planning director and the director of water supply may adopt administrative rules regarding the administration of this chapter, pursuant to chapter 91, Hawaii Revised Statutes.

19.61.150 Severability. Should any section or provision of this ordinance be declared invalid, such decision shall not affect the validity of the ordinance as a whole or any other part thereof. A determination that any portion or provision of this wellhead protection overlay district is invalid shall not invalidate any permit previously issued hereunder."

SECTION 2. This ordinance shall take effect upon its approval.

