

Multiple Agency Fiscal Note Summary

Bill Number: 2547 HB	Title: Synthetic turf materials
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Estimated Cash Receipts

NONE

Estimated Expenditures

Agency Name	2015-17			2017-19			2019-21		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Department of Health	5.0	1,910,000	1,910,000	7.5	1,768,000	1,768,000	5.6	1,362,000	1,362,000
Department of Ecology	.4	0	336,657	.8	0	831,414	1.0	0	267,780
Environmental and Land Use Hearings Office	.0	0	0	.0	0	0	.0	0	0
Total	5.4	\$1,910,000	\$2,246,657	8.3	\$1,768,000	\$2,599,414	6.6	\$1,362,000	\$1,629,780

Local Gov. Courts *									
Loc School dist-SPI	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Local Gov. Other **	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Local Gov. Total									

Estimated Capital Budget Impact

NONE

Prepared by: Linda Steinmann, OFM	Phone: 360-902-0573	Date Published: Final 2/ 2/2016
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* See Office of the Administrator for the Courts judicial fiscal note

** See local government fiscal note

Individual State Agency Fiscal Note

Bill Number: 2547 HB	Title: Synthetic turf materials	Agency: 303-Department of Health
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Part I: Estimates

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No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Expenditures from:

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years	0.0	10.0	5.0	7.5	5.6
Account					
General Fund-State 001-1	0	1,910,000	1,910,000	1,768,000	1,362,000
Total \$	0	1,910,000	1,910,000	1,768,000	1,362,000

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

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If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐

If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐

Capital budget impact, complete Part IV.

☒

Requires new rule making, complete Part V.

Legislative Contact: Jacob Lipson	Phone: 360-786-7196	Date: 01/19/2016
Agency Preparation: Jodine Sorrell	Phone: 360-236-3015	Date: 01/28/2016
Agency Approval: Stacy May	Phone: 360-236-4532	Date: 01/28/2016
OFM Review: Bryce Andersen	Phone: (360) 902-0580	Date: 02/01/2016

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

Section 4: The Department of Ecology (ECY) and the Department of Health (DOH) shall establish a synthetic turf safety advisory committee including scientists, health risk professionals, experts in lab and environmental exposure protocols, nonprofit organization representatives with expertise in consumer exposure to toxic substances, and parents or guardians of minors who use recreational facilities. DOH, in consultation with ECY and the synthetic turf safety advisory committee, shall adopt by rule testing procedures for determining the safety of synthetic turf.

Section 5: Recreational facilities must post a health advisory warning adjacent to recreational areas that have not been subject to a safety determination. DOH, in consultation with the synthetic turf safety advisory committee, may adopt rules that establish the content and placement of the health advisory warning signage.

Section 6: DOH shall establish a registry to track the incidence of cancer and lung diseases among high-frequency users of synthetic turf recreational facilities. DOH shall adopt rules as to what types of cancer and lung disease must be tracked by the registry, who must report to the registry, and the form and timing of reports to the registry. By December 1, 2019, DOH must submit a report to the legislature that includes analysis of data from the registry, a review of published research on synthetic turf field health risks and alternatives, and an assessment of alternatives. DOH must provide updated information to the legislature as it becomes available.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

Section 4:

Synthetic Turf Safety Advisory Committee

In section 4(1), DOH is required, along with ECY, to establish a Synthetic Turf Advisory Committee.

Assumptions:

- The Synthetic Turf Advisory Committee will be in place from July 2016 to June 2019 during development of field testing procedures and rulemaking.
- DOH assumes costs for staff work on the draft proposed procedures for rules as part of the Synthetic Turf Advisory Committee in fiscal year (FY) 2017, but no costs for its involvement in the committee in FYs 2018 and 2019.
- Work on development for draft proposed procedures for rules will begin July 2016.

Taking part in the Synthetic Turf Advisory Committee to develop proposed procedures will require:

0.1 FTE HSC 3 for FY 2017 to coordinate the startup of the advisory committee and track the progress and information of the committee's work.

1.0 FTE Toxicologist 3 (Tox) and 1.0 FTE Chemist 3 in FY 2017 to research available methods, document any

limitations, work with advisory committee participants and respond to their questions, coordinate with ECY, discuss analytical methods and costs, work with turf manufacturers, work with impacted communities by supporting outreach and education efforts. Draft, vet, and coordinate final draft recommendations with committee and prepare for rulemaking.

Rules for testing procedures for determining the safety of synthetic turf

In section 4(2), DOH is required to adopt testing procedures for determining the safety of synthetic turf.

Assumptions:

- Rulemaking begins July 2017.
- DOH and ECY assume rulemaking will take two years to complete.
- Rulemaking is expected to take longer than usual due to the extraordinary amount of interest in this issue and the requirement that each recreational facility wanting to use synthetic turf must 1) identify chemical constituents of the crumb rubber desired for use, 2) conduct an assessment of risk to determine if defined risk levels are exceeded, and 3) meet standards set by the Model Toxics Control Act and the Children's Safe Products Act.
- Attorney General Office time is estimated at 8 hours each of Attorney General time and Paralegal time in both FY 2017 and FY 2018.

Rulemaking FYs 2018 and 2019 (July 2017 through June 2019) will require:

0.5 FTE Tox 3 and 0.5 FTE Chemist 3 for two years, July 2017 through June 2019, to provide technical support to rule adoption.

Total costs for section 4:

FY 2017 – 2.8 FTE, \$297,000

Ongoing costs ending June 2019:

FY 2018 – 1.4 FTE, \$143,000

FY 2019 – 1.4 FTE, \$143,000

Attorney General estimated costs of 8 hours each of Attorney General time and Paralegal time totaling \$1,225 in FY 2017 and \$1,225 in FY 2018 are included in the total costs for section 4.

Costs for section 4 also include 0.2 FTE HSC 1 and 0.4 FTE Fiscal Analyst 2 (FA) and associated costs for increased division and agency workload in FY 2017, and 0.1 FTE HSC 1 and 0.2 FTE FA and associated costs for increased division and agency workload in FY 2018 and FY 2019.

Section 5: Recreational facilities are required to post a health advisory warning adjacent to recreational areas that have not been subject to a safety determination. DOH may adopt rules that establish the content and placement of the health advisory warning signage.

Assumptions for section 5:

- DOH assumes that recreational facility owners will look to DOH for guidance for appropriate posting.
- DOH assumes that although it has authority to adopt rules, this rulemaking will not be necessary or feasible to provide timely information for posting.

Signage will require:

0.5 FTE HSC 3 in FY 2017 and 2018 to develop, vet, and test recommended signage as well as provide signage notification and education for recreational facility operators.

0.2 FTE Tox 2 one-time costs for FY 2017 to provide technical support to signage development and educational materials.

Total costs for section 5:

FY 2017 – 0.8 FTE, \$87,000, and FY 2018 – 0.5 FTE, \$58,000

Costs for section 5 include 0.1 FTE FA 2 and associated costs in FY 2017 for increased agency workload.

Section 6: DOH is required to establish a registry to track the incidence of cancer and lung diseases among high-frequency users of synthetic turf recreational facilities; adopt rules as to what types of cancer and lung disease must be tracked by the registry, who must report to the registry, and the form and timing of reports to the registry; and submit a report to the legislature by December 1, 2019, that includes analysis of data from the registry, a review of published research on synthetic turf field health risks and alternatives, and an assessment of alternatives. DOH must provide updated information to the legislature as it becomes available.

Registry development and maintenance

Assumptions:

- DOH and ECY assumes three registries will need to be linked 1) cancer registry, 2) lung disease registry, and 3) an exposure registry for new reporting from entities who don't usually report to DOH, i.e., coaches, schools, sports leagues.
- DOH already has a cancer registry.
- New registries will need to be developed for lung disease and exposure.
- DOH assumes the IT work for the new registry development and maintenance will be contracted out, since DOH does not have the needed resources.
- Development of new registries will begin July 2016.
- DOH assumes development of the registries will take 12 months.
- DOH staff will be needed beginning July 2016 to design the registries and support development by the contractor, and beginning July 2017 to collect and process data from the registries.

The IT contract for System development will include:

- An outward facing application (web page for the public) for collection of information from users of facilities that have synthetic turf materials
- An application to collect and cross correlate occurrences of lung diseases
- Interfaces to allow cross communications with the cancer registry as well as other transport systems that allow the collection and reporting on health related activities
- Mechanisms for providing reports to DOH, interested parties, and the newly-required Open Data Portal (OCIO policy 187, data.wa.gov)

Contractor rates were used for estimates:

Start up	\$490,000 (build and hardware costs)
Year 1	\$358,000 (maintenance)
Year 2	\$101,000 (maintenance and some build)
Year 3	\$101,000 “
Year 4	\$101,000 “
Year 5	\$101,000 “

Five year TCO \$1,251,000 (total cost of ownership)

Ten year TCO \$2,503,000

Based on twenty-plus years of operating a cancer registry, DOH assumes the following staff is required to design the lung disease and exposure registries, support development of the registries by the contractor, and collect and process data from the registries once they are complete:

In FY 2017 DOH will need staff to design the lung disease and exposure registries, support development of the registries by the contractor, and create the form for reporting.

0.5 FTE HSC 1

0.6 FTE Epidemiologist 3 (Epi)

1.0 FTE Epi 2

0.1 FTE WMS 3

In FY 2018 and ongoing, DOH will need staff to collect and process data from the lung disease and exposure registries once they are complete, link data sets, and provide training and troubleshooting for the public:

1.5 FTE Epi 2

1.1 FTE Epi 3

1.0 FTE HSC 1

0.1 FTE WMS 3

Rulemaking

Assumptions:

- Rulemaking will need to be done for both the lung disease registry and the exposure registry. Rules are expected to take 12 months to complete.
- Attorney General Office time is estimated at 8 hours each of Attorney General time and Paralegal time.

One-time rulemaking in FY 2017 to determine what types of cancer and lung disease must be tracked by the registry, who must report to the registry, the form and timing of reports to the registry, define high frequency users, and develop a means of identifying exposures among these users, DOH will require:

0.9 FTE Epi 2

0.6 FTE Epi 3

0.1 FTE WMS 3

Reporting

Assumptions:

- This cost estimate is contingent on work being performed in section 4.
- DOH and ECY assume that ECY will do an alternative assessment of crumb rubber turf to be used for the report.

Beginning FY 2017 and ongoing, 0.5 FTE HSC 4 is required to manage reporting, communication, and education.

In FY 2018 and FY 2019, 0.2 FTE Tox 3 will be required to work on the initial report to the legislature.

Total costs for section 6:

FY 2017 – 6.3 FTE, \$1,524,000

Ongoing costs:

FY 2018 – 5.8 FTE, \$712,000

FY 2019 – 5.8 FTE, \$712,000

FY 2020 – 5.6 FTE, \$681,000

FY 2021 – 5.6 FTE, \$681,000

Attorney General estimated costs of 16 hours each of Attorney General time and Paralegal time totaling \$2,450 in FY 2017 are included in the total costs for section 6.

Costs for section 6 also include 0.4 FTE HSC 1 and 1.2 FTE Fiscal Analyst 2 (FA) and associated costs for increased division and agency workload in FY 2017, and 0.5 FTE HSC 1 and 0.9 FTE Fiscal Analyst 2 (FA) in FY 2018 and ongoing.

Total costs for fiscal note:

FY 2017 – 10.0 FTE, \$1,910,000

Ongoing costs:

FY 2018 – 7.8 FTE, \$913,000

FY 2019 – 7.2 FTE, \$855,000

FY 2020 – 5.6 FTE, \$681,000

FY 2021 – 5.6 FTE, \$681,000

Total Attorney General estimated costs of 24 hours of Attorney General time and 24 hours of Paralegal time totaling \$3,675 in FY 2017 and 8 hours of Attorney General time and 8 hours of Paralegal time totaling \$1,225 in FY 2018 are included in total costs.

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years		10.0	5.0	7.5	5.6
A-Salaries and Wages		699,000	699,000	1,036,000	766,000
B-Employee Benefits		244,000	244,000	363,000	272,000
C-Professional Service Contracts		848,000	848,000	202,000	202,000
E-Goods and Other Services		98,000	98,000	146,000	106,000
J-Capital Outlays		8,000	8,000		
M-Inter Agency/Fund Transfers					
P-Debt Service					
T-Intra-Agency Reimbursements		13,000	13,000	21,000	16,000
9-					
Total:	\$0	\$1,910,000	\$1,910,000	\$1,768,000	\$1,362,000

III. B - Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2016	FY 2017	2015-17	2017-19	2019-21
CHEMIST 3	70,056		1.0	0.5	0.5	
EPIDEMIOLOGIST 2	83,316		1.9	1.0	1.5	1.5
(NON-MEDICAL) EPIDEMIOLOGIST 3	91,956		1.2	0.6	1.1	1.1
(NON-MEDICAL) Fiscal Analyst 2	45,828		1.8	0.9	1.2	0.9
HEALTH SERVICES	47,208		1.0	0.5	1.0	1.0
CONSULTANT 1 HEALTH SERVICES	63,480		0.6	0.3	0.3	
CONSULTANT 3 HEALTH SERVICES	70,056		0.5	0.3	0.5	0.5
CONSULTANT 4 Health Svcs Conslt 1	44,712		0.7	0.4	0.7	0.5
TOXICOLOGIST 2	79,296		0.2	0.1		
TOXICOLOGIST 3	87,528		1.0	0.5	0.7	
WMS 03	107,712		0.1	0.1	0.1	0.1
Total FTE's	791,148		10.0	5.0	7.5	5.6

Part IV: Capital Budget Impact

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

Section 4: DOH, in consultation with ECY and the synthetic turf safety advisory committee, shall adopt by rule testing procedures for determining the safety of synthetic turf.

Section 6: DOH shall adopt rules as to what types of cancer and lung disease must be tracked by the registry, who must report to the registry, and the form and timing of reports to the registry.

Individual State Agency Fiscal Note

Revised

Bill Number: 2547 HB	Title: Synthetic turf materials	Agency: 461-Department of Ecology
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Part I: Estimates

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No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Expenditures from:

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years	0.0	0.8	0.4	0.9	1.0
Account					
Environmental Legacy Stewardship Account-State 19G-1	0	336,657	336,657	831,414	267,780
Total \$	0	336,657	336,657	831,414	267,780

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☒

If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐

If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐

Capital budget impact, complete Part IV.

☐

Requires new rule making, complete Part V.

Legislative Contact: Jacob Lipson	Phone: 360-786-7196	Date: 01/19/2016
Agency Preparation: Vince Chavez	Phone: 360-407-6561	Date: 01/26/2016
Agency Approval: Erik Fairchild	Phone: 360-407-7005	Date: 01/26/2016
OFM Review: Linda Steinmann	Phone: 360-902-0573	Date: 01/26/2016

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

Currently there is no law in place regulating exposure to synthetic turf field materials. This bill would require evaluating the exposure to children from substances used in synthetic turf fields, establishing procedures to test fields, posting warnings at fields, establishing a health registry, and collecting additional information.

Section 3 – Turf Testing Protocol

(1) Manufacturers would be required to demonstrate the safety of the synthetic turf using a testing protocol. This information would be reported to the Washington State Department of Ecology (Ecology) before synthetic turf use is deployed in Washington State.

(2) Ecology would have to establish threshold limits of hazardous substances in synthetic turf that would be protective of human health when used in athletic and play fields. Ecology would establish a testing protocol for manufacturers that would demonstrate the safety of the product to Ecology.

Section 3(2) would also direct that the thresholds be based on RCW 70.105D, Model Toxics Control Act (MTCA) and rules adopted under MTCA. Specifically, (a) that concentrations of individual hazardous substances would not present an excess cancer risk greater than one in one million; (b) that a combination of hazardous substances would not present an excess cancer risk rate greater than one in one-hundred thousand; (c) and that hazardous substances would not present acute or chronic toxic effects on human health that exceed a hazard quotient of one. The hazard quotient is used to measure toxic effects for non-carcinogens.

(3) Manufacturer reports to Ecology would include test results for lead, cadmium and phthalates at the allowable limits established in the Children's Safe Products Act (CSPA) (RCW 70.240.020). (The bill references subsection 030, but that is assumed to be a typographical error, as the standards are in 020.)

Section 4 – Synthetic Turf Safety Advisory Committee and Field Testing Procedure

(1) Ecology and the Washington State Department of Health (Health) would establish a synthetic turf safety advisory committee comprised of independent scientists, health professionals, experts in lab testing and environmental exposure, nonprofit and consumer exposure representatives, and parents of children who use synthetic turf fields.

(2) Health, in consultation with Ecology and the advisory committee, would adopt rules detailing testing procedures for determining the safety of synthetic turf. Rulemaking would start in July 2017 and be complete by June 2019.

(3) Testing procedures would replicate use conditions and maximum exposure scenarios for synthetic turf.

Section 5 – Health Advisory Warning. This section has no fiscal impact on Ecology. This section would require Health to develop advisory warnings for synthetic turf that has not been subjected to a safety determination.

Section 6 – Health Registry and Report to the Legislature

- (1) Health would be required to establish a registry to track incidence of cancer and lung disease among high frequency users of synthetic turf fields. Health may adopt rules for reporting requirements related to this registry.
- (2) By December 1, 2019, Health would submit a report to the legislature regarding the health risks associated with the use of synthetic turf fields. The report would include an analysis of registry data, research review, analysis of published studies, and an alternatives assessment prepared in consultation with Ecology.
- (3) Health would periodically update the report to the legislature.

Section 7 – Enforcement

- (1) Ecology enforcement would include orders to facility operators or manufacturers in violation of the requirements. Operators or manufacturers that fail to take corrective action would be liable for a penalty not to exceed ten thousand dollars for each day of noncompliance.
- (2) Penalties and orders would be appealable to the pollution control hearings board (RCW 43.21B).

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

Ecology assumes the purpose of the penalty provisions in section 7 is to ensure compliance, not to generate revenue. On this basis and experience with enforcement of similar laws, Ecology assumes no penalty revenue as a result of this bill.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

Section 3 – Turf Testing Protocol

Ecology would establish threshold limits of hazardous substances in synthetic turf that would be protective of human health when used in athletic and play fields. The thresholds would be based on RCW 70.105D, Model Toxics Control Act (MTCA) and rules adopted under MTCA. Ecology would have to establish a testing protocol for manufacturers that would demonstrate the safety of the product to the Department of Ecology. Manufacturers that report to Ecology would have to include results for lead, cadmium and phthalates as described in the Children's Safe Products Act (RCW 70.240.030).

MTCA uses standard risk assessment techniques to determine appropriate cleanup levels at hazardous waste sites. The scientific method and establishment of risk limits are actually independent of MTCA. Though the basic framework is established by rule and law, with the intent that knowledgeable persons will employ accepted risk assessment methodology to site cleanup, most input parameters used for risk analyses are not specified by rule, but rather are researched and developed for site-specific and media-specific situations.

In order to establish acceptable limits for hazardous substances in play and athletic fields, Ecology and Health would need to conduct a study specific to synthetic turf. This study would use accepted scientific methodology (risk assessment) in order to define rigorous parameters and test protocols required by Section 3. This work would need to identify chemicals of concern, develop exposure pathways and durations, evaluate age-based exposure factors, research and evaluate analytical methods, research toxicological data, and produce recommendations for peer review.

Establishing the threshold limits, testing protocol and the manufacturer manual would entail a minimum 24 month effort (July 2016 to June 2018) to complete the following tasks:

- Literature search and review regarding material and chemical composition of synthetic turf.
- Identify potential chemicals present in the material sold in WA that may be hazardous to human health.
- Research toxicological information for each of the identified chemicals of concern to find data on the reference doses, toxicological effects, target organs, age-related effects and other parameters.
- Gather physical/chemical data on the contaminants of concern such as volatility, solubility, molecular weight, to assist with pathway exposure analyses.
- Develop appropriate exposure scenarios (with age considerations) for playfields, athletic fields.
- Confirm multiple pathway exposures (such as residual dust on clothing and equipment) with empirical analysis.
- Conduct empirical data analysis based on the chemicals identified above to determine composition of synthetic materials commonly distributed in Washington. Complete “in-situ” sampling and analysis at a statistically valid number of facilities to determine the actual presence of selected contaminants in the air, soil, and other material that would be subject to human exposure; either dermal contact, inhalation, ingestion, or some combination of routes.
- Develop sampling plan for the empirical data study used to develop thresholds:
 - o Identify correct testing protocol and analytical methods for ambient air (dust and particulates and vapor), surfaces and soils, equipment and clothing
 - o Identify source materials and fields to test
 - o Define conditions for testing (weather, temperature, etc.)
- Write sample plan.
- Based on the empirical data, the potential exposures, known chemical, toxicological and physical properties, determine threshold limits for the products sold and used for construction of playfields. Consider appropriate risk levels and potential combinations of chemicals.
- Compare threshold limits with available analytical methods to determine appropriate testing protocol.
- Confirm capacity and capability of certified independent laboratories.
- Develop, write and publish manual for manufacturers that specifies:
 - o Sample collection procedures
 - o Analytical methods
 - o Frequency of analyses
 - o Reporting requirements

Assumptions

- Ecology would start development of the testing protocol in July 2016. Testing protocol development would require 24 months to complete; complete by June 2018.
- Upon completion of the turf testing protocol (starting July 2018), manufacturers and installers would be required to complete the testing and reporting prior to the installation, replacement or other deployment of synthetic turf in Washington State. Manufacturers would be required to submit data and reports to Ecology.
- Ecology would conduct outreach and technical assistance to manufacturers and installers of synthetic turf fields. The outreach effort would inform the manufacturers and installers of the turf testing protocol (including cadmium, lead and phthalate testing) required to be completed and submitted to Ecology prior to construction, installation, replacement, refill, or other deployment of a synthetic turf field in Washington. This effort would start in July 2018 and be ongoing.

The turf testing protocol would:

Require Ecology to lead the development of the testing protocol: conduct the literature search, identify

chemicals, research toxicology, develop exposure scenarios, assist with sampling and analysis efforts, determine threshold limits, evaluate appropriate analytical methods, and contribute to the manufacturer manual. This work would be performed by a Toxicologist 3 (Tox3) in FY17=0.12 FTE and FY18=0.12 FTE.

Require support for the Tox 3 to conduct the literature search, identify chemicals, research toxicology, develop exposure scenarios, assist with sampling and analysis efforts, determine threshold limits, evaluate appropriate analytical methods, and develop manufacturer manual. This work would be performed by a Toxicologist 2 (Tox2) in FY17=0.25 FTE and FY18=0.25 FTE.

Require Ecology to lead the data gathering efforts on chemicals of concern, direct development of the sampling and analysis plans and oversee the sampling efforts, evaluate appropriate analytical methods, confirm capacity and capability of analytical laboratories, and direct the development of the manufacturer manual. This work would be performed by an Environmental Specialist 5 (ES5) in FY17=0.05 FTE and FY18=0.05 FTE.

Require support for the data gathering efforts on chemicals of concern, develop the sampling and analysis plans and conduct the sampling efforts, evaluate appropriate analytical methods, confirm capacity and capability of analytical laboratories, and develop the manufacturer manual. This work would be performed by an Environmental Specialist 2 (ES2) in FY17=0.15 FTE and FY18=0.15 FTE.

Following completion of the testing protocol, Ecology would provide outreach and technical assistance support to manufacturers and installers of synthetic turf fields to complete the required turf testing protocol and submit the required report to Ecology; develop guidance for completing the testing protocol and reporting the results; review the submitted reports; verify that the results indicate the turf manufacturer or installer demonstrates the safety of the synthetic turf; and conduct ongoing communication with manufacturers and installers. This work would be performed by an Environmental Specialist 4 (ES4) in FY19 and ongoing = 0.20 FTE per year.

Object C includes costs in support of the testing protocol development including purchasing articles and publications (literature search, toxicology research and data gathering for chemicals of concern), purchasing sampling supplies for testing of turf fields, and printing the manufacturer manual. These costs would include publications \$3,900; sampling supplies \$30,000; printing \$2,000 for a total of \$35,900 to occur in FY17 and FY18 (\$17,950 per year).

Object E includes the cost of laboratory analysis for the testing protocol, specific to synthetic field turf, for a minimum of 300 samples and that each sample costs \$1,600 to analyze for a total of \$480,000 for laboratory cost to occur in FY17 and FY18 (\$240,000 per year).

Section 3 – turf testing protocol summary:

FY17 = 0.6 direct FTE, FY18 = 0.6 direct FTE, FY19 and ongoing = 0.2 direct FTE; Object C includes contracts of \$17,950 in both FY17 and FY18; Object E includes purchased services of \$240,000 in both FY17 and FY18 for lab analysis.

Section 4 – Synthetic Turf Safety Advisory Committee and Field Testing Procedures

Ecology would support Health in the establishment of a turf advisory committee, development of turf testing procedures, and rulemaking for the field testing procedures. Health and Ecology would consult with the advisory committee during development of the Field Testing Procedures and throughout rulemaking. Ecology would support Health during rule development for Field Testing Procedures for determining the safety of synthetic turf fields.

Assumptions:

- Advisory committee would be established in July 2016.
- Ecology and Health consult with Advisory Committee on testing development and rulemaking; consultation would occur at quarterly meetings of the Advisory Committee; starting in July 2016 and ending June 2019.
- Field Testing Procedures would be drafted by June 2017.
- Health would lead rulemaking, starting in July 2017 and ending June 2019. Ecology would provide technical support to Health during the rulemaking.

Advisory committee and testing procedures would:

Require Ecology to support Health with the establishment of the Advisory Committee; participate in Advisory Committee meetings; respond to requests from Health and the Advisory Committee; development of the Field Testing Procedures; and rulemaking. This work would be completed by an ES4 in FY17, FY18 and FY19 = 0.10 FTE per fiscal year.

Section 4 – synthetic turf safety advisory committee and field testing procedures summary:

FY17 = 0.10 direct FTE, FY18 = 0.10 direct FTE, and FY19 = 0.10 direct FTE per fiscal year.

Section 6 – Health Registry and Report to the Legislature

Health would establish a registry to track incidence of cancer and lung disease among high frequency users of synthetic turf fields. By December 1, 2019, Health would submit a report to the legislature regarding the health risks associated with the use of synthetic turf fields. The report would include an analysis of registry data, research review, analysis of published studies, and, in consultation with Ecology, an alternatives assessment,

Assumptions

- Ecology support for the Health registry would not be required.
- Ecology would support Health for the report to the legislature in December 2019 and any related updates.
- Drafting of the report to the legislature would occur from October to December 2019.
- An Alternatives Assessment (AA) of crumb rubber synthetic turf would be required to provide the assessment of the safety, environmental impacts, cost, and feasibility of alternatives to the use of tire crumbs.
- The AA would require that Ecology hire a contractor to complete the AA in accordance with the Washington Alternatives Assessment Guide or Interstate Chemicals Clearinghouse Alternatives Assessment Guide.
- The AA contract would have to be in place by July 2018 and completed by June 2019.
- Ecology would review the completed AA starting in July 2019 and summarize the results for the report to the legislature, required to be complete by December 1, 2019.

The report to the legislature would:

Require Ecology to support Health's report to the legislature by contracting for an AA. This would require an AA contract, participate in the AA stakeholder process, review the draft AA, conduct research, identify needs for additional information, and draft up the AA summary in the report to the legislature. This work would be completed by a Natural Resource Scientist 3 (NRS3) in FY19 = 0.25 FTE and FY20 = 0.12 FTE.

Additional support for the AA contracting would require outreach and support as directed by the NRS3, prepare and manage the AA contract, support AA stakeholder involvement efforts, and assisting with the AA summary in the report to the legislature. This work would be completed by an ES4 in FY19 = 0.25 FTE and FY20 = 0.13 FTE.

Object C includes the AA contract for crumb rubber synthetic turf fields at the cost of \$412,000 for preparation of an independent AA in FY19.

Section 6 – health registry and report to the legislature summary:

FY19 = 0.5 direct FTE, FY20 = 0.3 direct FTE; Object C includes a one-time contract of \$412,000 in FY19.

Section 7 – Enforcement

Ecology enforcement would include working with the facility operator or manufacturer to come into compliance, and issuing orders to facility operators or manufacturers in violation of the requirements..

Based on experience with enforcement of similar laws such as the Children’s Safe Product Act (RCW 70.240), the prohibition on bisphenol A in certain products (RCW 70.280), and the prohibition on polybrominated diphenyl ethers in certain products (RCW 70.76), enforcement required in this section would not result in a need for Ecology to issue penalties. The AGO does not anticipate any appeals of orders issued by Ecology. Therefore, the AGO would not anticipate legal services defending appeals of orders or penalties.

With the enactment of this bill, the AGO Ecology Division would provide legal advice to Ecology relating to bringing crumb rubber turf field owners and manufacturers into compliance with the requirement to test for safety (e.g., help drafting letters, notices of correction, possibly orders to comply). The level of this work would be within the basic current level of support provided to Ecology, and would not require additional resources.

Assumptions

- Ecology would work with regulated entities to come into compliance with the law beginning in July 2018 and for the rule in July 2019. Ecology would allow a two-year window for manufacturers and field owners to come into compliance before initiating any enforcement efforts.
- Enforcement of turf testing protocol requirements would start in July 2020, two years after completion of the turf testing protocol, to allow manufacturers time to come into compliance.
- Enforcement of rules developed by Health for Field Testing Procedures would start in July 2021, two years after rule adoption, to allow field operators time to come into compliance.
- AAG support would be required for all compliance efforts, starting in July 2020. AAG compliance support costs would be within the basic current level of support provided to Ecology, and would not require additional resources.
- No penalties or appeals would be anticipated for enforcement of this bill.
- Product testing to ensure compliance would begin July 2020.
- Product testing of synthetic turf would be conducted for a limited number of installations to confirm compliance. Samples of turf product would be analyzed for organic and inorganic compounds.

Enforcement would:

Require Ecology to write orders, oversee compliance and product testing, work with manufacturer, vendors, and field operators to come into compliance. This work would be completed by an ES4 in FY21 and ongoing = 0.50 FTE per fiscal year.

Require Ecology to write the sampling and quality assurance plan, purchase and test products for the purpose of ensuring compliance with the Turf Testing Protocol and Field Testing Procedure. This work would be completed by a Chemist 4 (Chem4) in FY21 and ongoing = 0.50 FTE per fiscal year.

Object E includes enforcement laboratory costs for compliance sampling and testing. We assume a minimum of

50 samples would be needed and that each sample would cost \$1,600 to analyze, for \$80,000/year in laboratory costs ongoing beginning in FY21.

Section 7 – enforcement summary:

FY21 and ongoing = 1.0 direct FTE; Object E includes purchased service contracts of \$80,000 in FY21 and ongoing for lab analysis.

Notes on costs by object:

Salary estimates are current actual rates at step H, the agency average for new hires.

Benefits are the agency average of 35.5% of salaries.

Contracts include agreements that total \$17,950 in FY17, \$17,950 in FY18, and \$412,000 in FY19.

Goods and Services are the agency average of \$4,008 per direct program FTE. Object E also includes purchased service contracts that total \$560,000 (\$240,000 in FY17, \$240,000 in FY18, and \$80,000 in FY21).

Travel is the agency average of \$2,227 per direct program FTE.

Equipment is the agency average of \$1,041 per direct program FTE.

Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 26.1% of direct program salaries and benefits, and is shown as object 9. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT Specialist 2.

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years		0.8	0.4	0.9	1.0
A-Salaries and Wages		43,211	43,211	88,238	102,871
B-Employee Benefits		15,340	15,340	31,325	36,520
C-Professional Service Contracts		17,950	17,950	429,950	
E-Goods and Other Services		242,685	242,685	245,891	86,614
G-Travel		1,492	1,492	3,274	3,675
J-Capital Outlays		697	697	1,530	1,719
9-Agency Administrative Overhead		15,282	15,282	31,206	36,381
Total:	\$0	\$336,657	\$336,657	\$831,414	\$267,780

III. B - Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2016	FY 2017	2015-17	2017-19	2019-21
CHEMIST 4	74,970					0.3
ENVIRONMENTAL SPEC 2	42,487		0.2	0.1	0.1	
ENVIRONMENTAL SPEC 4	57,146		0.1	0.1	0.3	0.5
ENVIRONMENTAL SPEC 5	63,035		0.1	0.0	0.0	
FISCAL ANALYST 2			0.1	0.0	0.1	0.1
IT SPECIALIST 2			0.0	0.0	0.0	0.0
NATURAL RESOURCE SPEC 3	54,386				0.1	0.1
TOXICOLOGIST 2	73,137		0.3	0.1	0.1	
TOXICOLOGIST 3	80,723		0.1	0.1	0.1	
Total FTE's	445,884		0.8	0.4	0.9	1.0

Part IV: Capital Budget Impact

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 2547 HB	Title: Synthetic turf materials	Agency: 468-Environmental & Land Use Hearings
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Part I: Estimates

☒ No Fiscal Impact

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

- ☐ If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- ☐ If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- ☐ Capital budget impact, complete Part IV.
- ☐ Requires new rule making, complete Part V.

Legislative Contact: Jacob Lipson	Phone: 360-786-7196	Date: 01/19/2016
Agency Preparation: Joan Marchioro	Phone: 360 664-9171	Date: 01/21/2016
Agency Approval: Joan Marchioro	Phone: 360 664-9171	Date: 01/21/2016
OFM Review: Linda Steinmann	Phone: 360-902-0573	Date: 01/21/2016

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

FNS 2547 HB concerns the use of used tires in the construction of synthetic turf fields. The bill establishes protocols for the testing of used tire material used in recreational facilities to protect against potential risks to the users health, establishes a warning system to alert facility users of the potential health risks, and provides for the collection of information concerning health risks associated with the use of synthetic turf facilities.

The following sections are germane to the work of the EHO:

Section 3 requires a manufacturer to demonstrate the safety of the synthetic turf to the Department of Ecology (Ecology) before it can construct, install or replace synthetic turf. The section provides a protocol for the manufacturer to follow to demonstrate the safety of the materials being used.

Section 4 creates a synthetic turf advisory committee headed by Ecology and the Department of Health (DOH). The section directs DOH to adopt by rule, testing procedures for determining the safety of synthetic turf and provides elements that must be included in the adopted testing procedures.

Section 5 requires recreational facility operators to post health advisory warnings adjacent to the recreational facilities with a synthetic turf that has not been subject to a safety determination under Section 3. The section includes mandatory information to include in the health advisory and authorizes DOH to promulgate rules to implement the requirements.

Section 7 authorizes Ecology to issue administrative orders requiring compliance to recreational facility operators or synthetic turf manufacturers in violation of the provisions of the chapter. Ecology can issue penalties if the recipient of an administrative order fails to take corrective action. Any administrative orders and/or penalties issued are appealable to the Pollution Control Hearings Board. According to the lead agency assumptions, enforcement under this chapter will not occur until June 2021. The Board believes that there will be few appeals filed as a result of this legislation and that it will be able to absorb any such appeals within its current resources.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

Part III: Expenditure Detail

Part IV: Capital Budget Impact

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.

LOCAL GOVERNMENT FISCAL NOTE

Department of Commerce

Bill Number: 2547 HB	Title: Synthetic turf materials
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Part I: Jurisdiction-Location, type or status of political subdivision defines range of fiscal impacts.

Legislation Impacts:

- ☒ Cities: City parks
- ☒ Counties: County parks
- ☐ Special Districts:
- ☒ Specific jurisdictions only: Jurisdictions that operate recreation facilities with sythetic turf
- ☐ Variance occurs due to:

Part II: Estimates

- ☐ No fiscal impacts.
- ☒ Expenditures represent one-time costs: Installing health advisory warnings at existing synthetic turf recreational facilities
- ☐ Legislation provides local option:
- ☒ Key variables cannot be estimated with certainty at this time: The number of county and city parks operating recreational facilities with sythetic turf

Estimated revenue impacts to:

None

Estimated expenditure impacts to:

Indeterminate Impact

Part III: Preparation and Approval

Fiscal Note Analyst: Kandi Bauman	Phone: 360/725-5036	Date: 01/25/2016
Leg. Committee Contact: Jacob Lipson	Phone: 360-786-7196	Date: 01/19/2016
Agency Approval: Steve Salmi	Phone: (360) 725 5034	Date: 01/25/2016
OFM Review: David Dula	Phone: (360) 902-7437	Date: 01/26/2016

Part IV: Analysis

A. SUMMARY OF BILL

Provide a clear, succinct description of the bill with an emphasis on how it impacts local government.

This bill pertains to ensuring that recreational facilities with synthetic turf materials are not a hazard to public health.

Section 3 prohibits entities from constructing, installing, replacing, refilling, or otherwise deploying synthetic turf unless the manufacturer demonstrates the safety of the turf to the Department of Ecology using the testing protocol established in this bill.

Section 5 requires a recreational facility operator to post a health advisory warning adjacent to any field, playground, or recreational facility with synthetic turf that has not been subject to a safety determination under Section 3.

Section 7 specifies that any recreational facility operator or manufacturer that fails to take corrective action as specified is liable for a civil penalty not to exceed \$10,000 for each day of continued noncompliance.

B. SUMMARY OF EXPENDITURE IMPACTS

Briefly describe and quantify the expenditure impacts of the legislation on local governments, identifying the expenditure provisions by section number, and when appropriate, the detail of expenditures. Delineate between city, county and special district impacts.

Expenditure impacts related to this bill are indeterminate. Comprehensive data on when and where synthetic turf fields are installed across the state's city and county parks is not available. Estimates on how many facilities would need to post health advisory warnings or comply with future standards of repair or replacement are unknown. However, Clark County indicated that installing warning signs for each facility could range between \$60 to \$200 depending on materials and sign size.

C. SUMMARY OF REVENUE IMPACTS

Briefly describe and quantify the revenue impacts of the legislation on local governments, identifying the revenue provisions by section number, and when appropriate, the detail of revenue sources. Delineate between city, county and special district impacts.

No revenue impact.

SOURCES:

Clark County Parks and Recreation

City of Vancouver Parks and Recreation

Pierce County Parks and Recreation Administration

Washington State Association of Counties

Individual State Agency Fiscal Note

Bill Number: 2547 HB	Title: Synthetic turf materials	Agency: SDF-School District Fiscal Note - SPI
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Part I: Estimates

☐

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Expenditures from:

Non-zero but indeterminate cost. Please see discussion.

Estimated Capital Budget Impact:

NONE

The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.

Check applicable boxes and follow corresponding instructions:

☐

If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☒

If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐

Capital budget impact, complete Part IV.

☐

Requires new rule making, complete Part V.

Legislative Contact: Jacob Lipson	Phone: 360-786-7196	Date: 01/19/2016
Agency Preparation: Jami Marcott	Phone: (360) 725-6230	Date: 01/20/2016
Agency Approval: Mike Woods	Phone: (360) 725-6283	Date: 01/20/2016
OFM Review: Kate Davis	Phone: (360) 902-0570	Date: 01/20/2016

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.

Section 2 Definitions

A "recreational facility operator" means any public or private entity that makes available for public use a field, playground, or other recreational facility that contains synthetic turf.

"Synthetic turf" means any material or composition that contains ground or crumb rubber from waste tires that is used to cover or surface a field, playground, or other recreational facility.

Section 3

Entities may not construct, install, replace, refill or otherwise deploy synthetic turf unless the manufacturer demonstrates the safety of the turf to the Department of Ecology using the testing protocol established in this bill.

Section 4

Requires the Departments of Ecology and Health to establish a synthetic turf safety advisory committee. The Department of Health shall adopt by rule testing procedures.

Section 5

A recreational facility operator must post a health advisory warning adjacent to any field, playground, or recreational facility with synthetic turf that has not been subject to a safety determination under section 3 of this bill.

II. B - Cash receipts Impact

Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.

II. C - Expenditures

Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.

Indeterminate.

OSPI does not collect data on the number of synthetic turf fields in use by school districts and testing procedures must still be developed. Therefore OSPI cannot estimate how many districts will need to post health advisory warnings.

As Section 3(1) does not allow for refill of existing synthetic fields, damaged fields may need to be replaced rather than repaired. OSPI does not maintain data as to the age or condition of these fields so the cost of replacing these worn fields with an alternate substrate is unknown.

Part III: Expenditure Detail

Part IV: Capital Budget Impact

Part V: New Rule Making Required

Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.