



# **APPLE MAGGOT QUARANTINE**

## **KEEPING WASHINGTON'S WASTE MOVING**

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Washington State Department of Ecology

WSEHA Annual Education Conference – May 6<sup>th</sup>, 2019



**HAVE YOU HEARD ABOUT THE APPLE MAGGOT?**

**DO YOU KNOW IF YOU LIVE IN A PEST-FREE  
OR A **QUARANTINE** AREA?**

**DO YOU KNOW WHERE YOUR GARBAGE GOES?**



**WASHINGTON APPLES - \$2 BILLION**

**APPLE MAGGOT A REAL THREAT**

**INHABITS APPLES, CRABAPPLES,  
CHERRIES, PEARS, PLUMS, HAWTHORN  
AND QUINCE**

**WSDA ESTIMATES 80% OF  
UNTREATED TREES IN WESTERN  
WASHINGTON ARE **INFESTED****





## **WHERE DID IT COME FROM?**

**1979** – FIRST DETECTED IN PORTLAND OR.

**1980** – FIRST DETECTED IN WASHINGTON, CLARK CO.

**1984** – FIRST AM QUARANTINE

DID NOT INCLUDE MUNICIPAL GREEN WASTE (MGW).

FOCUSED ON FRESH FRUIT THAT COULD BE A HOST

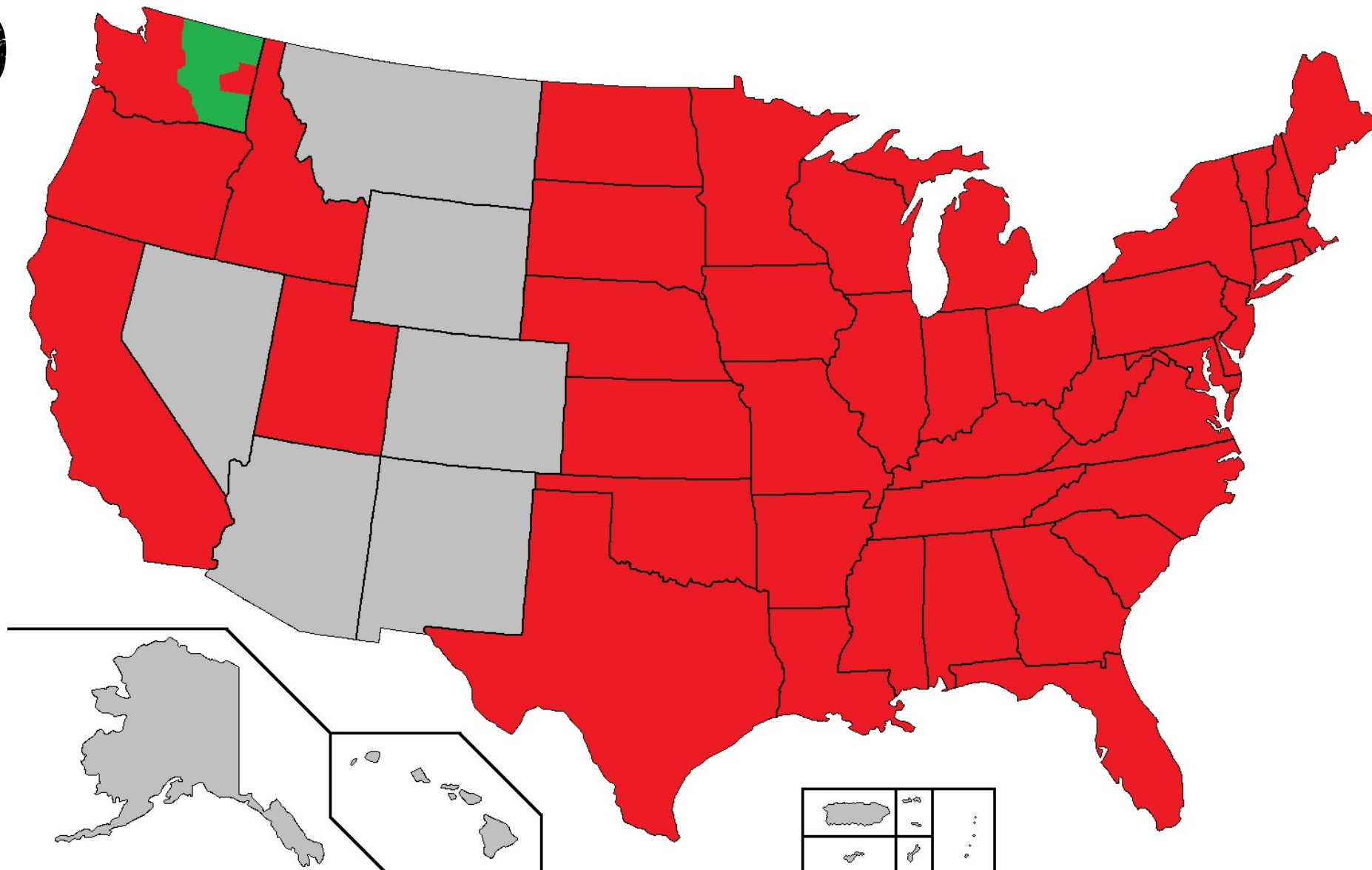
**2006-2012** QUARANTINE EXPANSION INTO  
YAKIMA AND CHELAN COUNTIES

**2014** – EMERGENCY RULE TO ADD MGW

**2017** – EMERGENCY RULE MADE  
PERMANENT

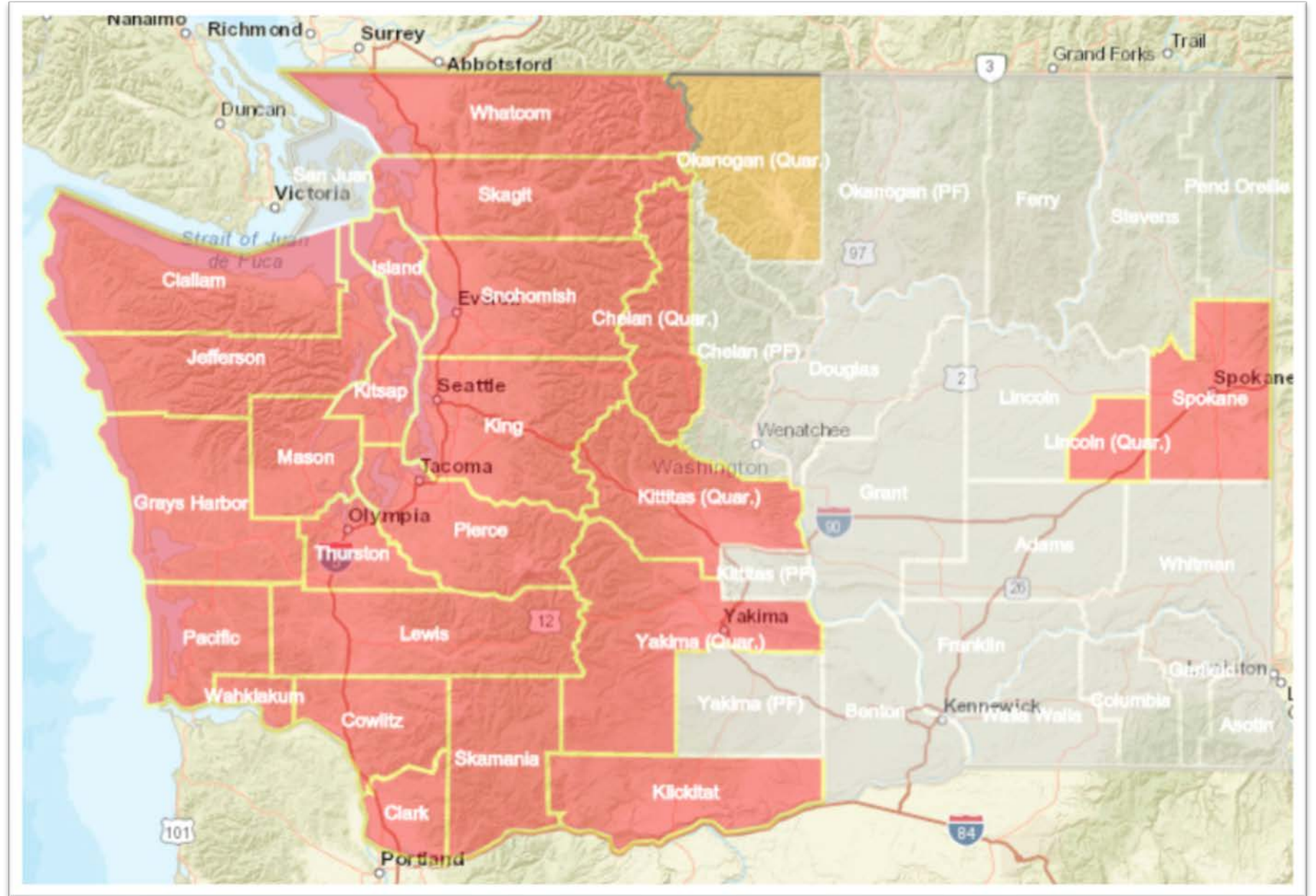
**2018** EXPANSION INTO  
OKANOGAN COUNTY

# QUARANTINED STATES





# QUARANTINE AREAS



Interactive version of the map at: [www.agr.wa.gov/plantinsects/insectpests/applemaggot/Quarantine.aspx](http://www.agr.wa.gov/plantinsects/insectpests/applemaggot/Quarantine.aspx)

# Composting and Anaerobic Digester Facilities in Central, WA

## WASTE MOVEMENT

IN YOUR GARBAGE...

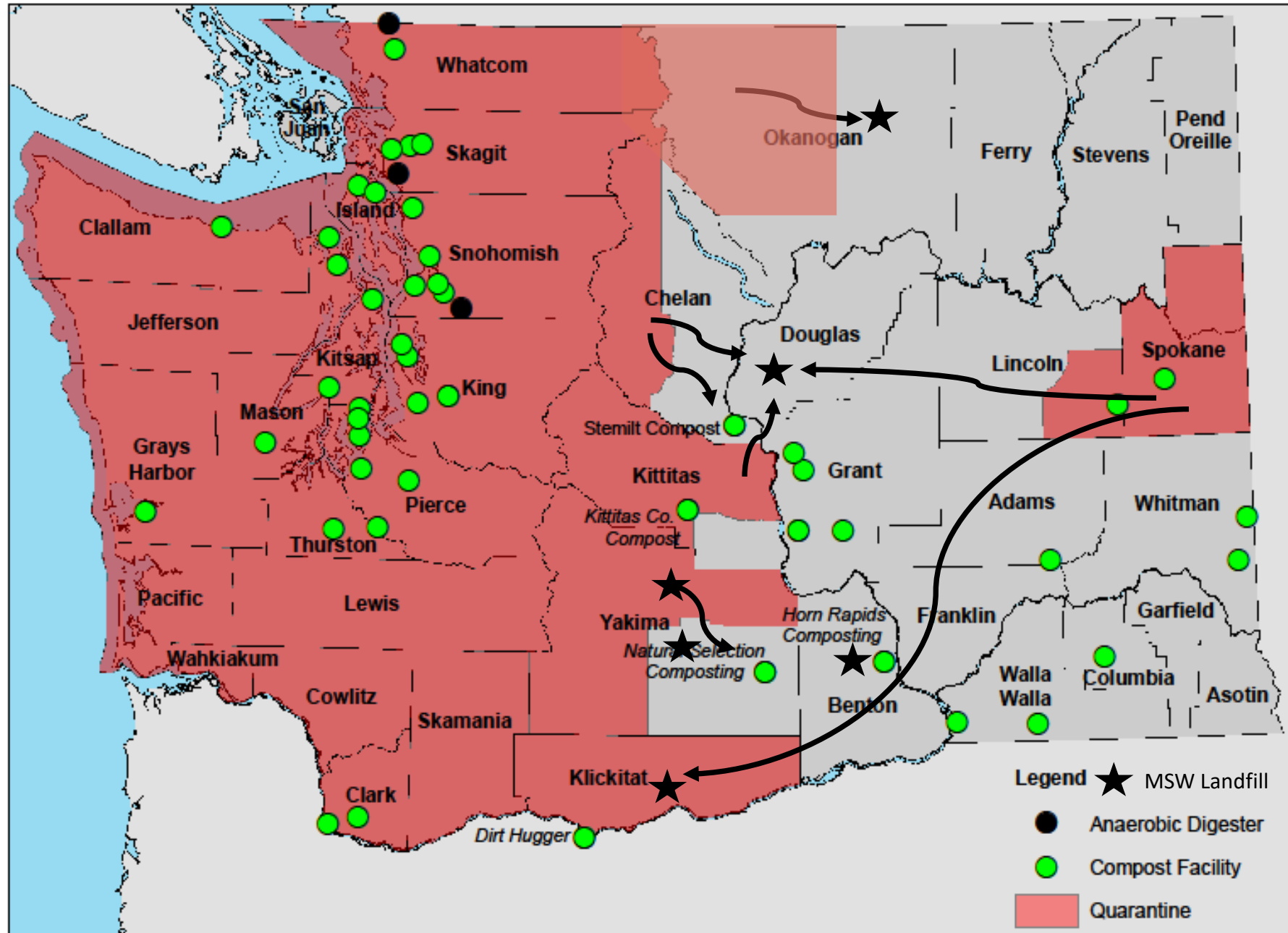
NO

FRUIT (COMMERCIAL OR HOME GROWN),

YARD WASTE,

WOODY DEBRIS,

VEGETABLES (HOME GROWN)



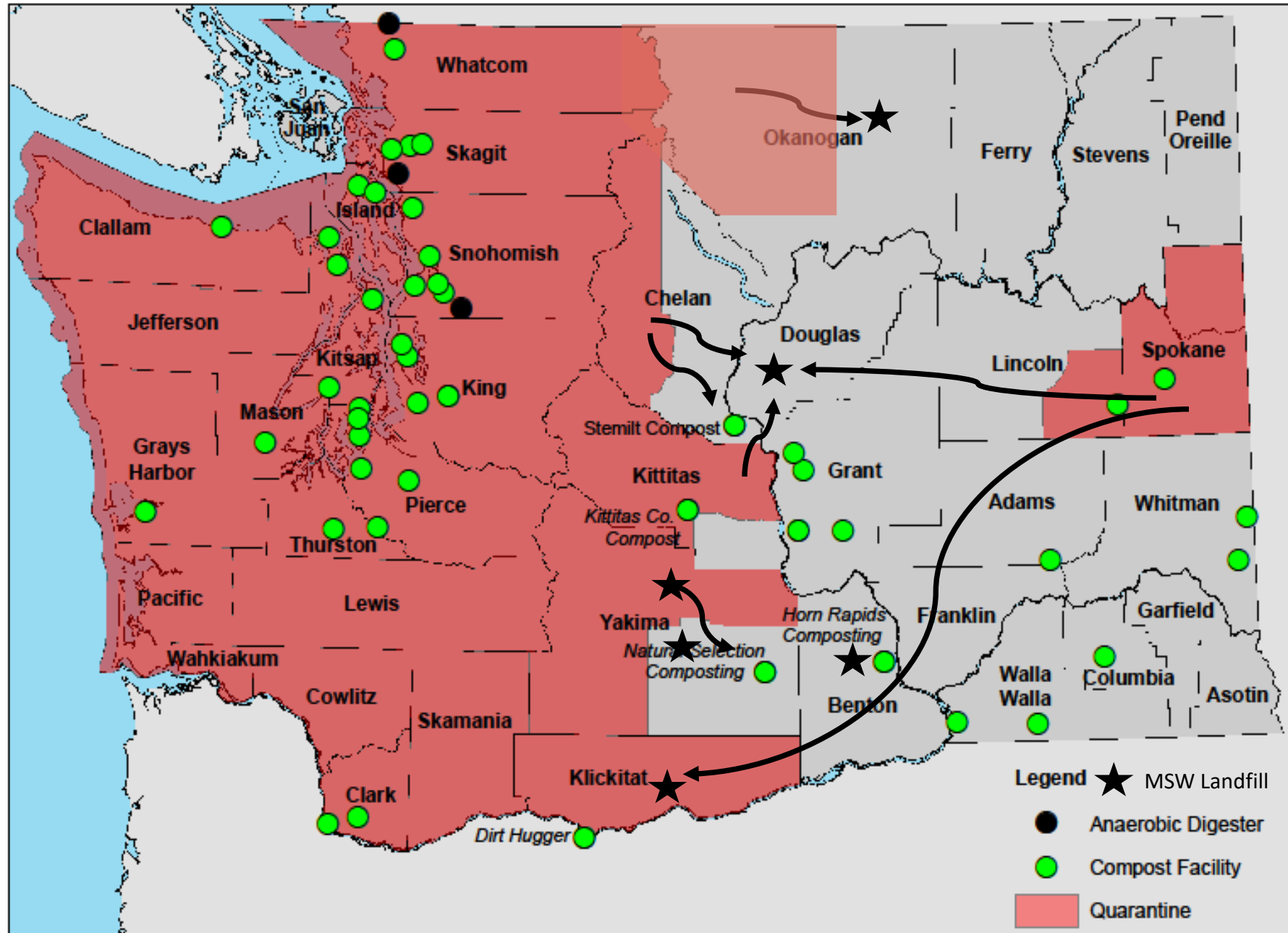
# WASTE MOVEMENT

OKANOGAN CENTRAL LANDFILL  
~ 35,004 TONS

GREATER WENATCHEE REGIONAL LANDFILL  
~322,000 TONS

HORN RAPIDS LANDFILL -  
~60,000 TONS

ROOSEVELT REGIONAL LANDFILL  
~2.4 MILLION TONS





- WSDA SPECIAL PERMIT
- STEAM
- TREATMENT

- SB 6055 (2017-2018)

KEEPING

THE

MOVING

WASTE

- HAULING TO WESTERN WA QUARANTINE AREAS

- CHIP AND SPREAD
- COMPOSTING

# **WSDA SPECIAL PERMIT WAC 16-470-124**

**REQUIRED TO TRANSPORT OR DISPOSE OF MGW OR MSW ORIGINATING IN THE AM  
QUARANTINE AREA TO THE PFA**

- 1. MECHANICALLY GRIND OR SHRED MATERIAL WITHIN  
THE QUARANTINE AREA**
- 2. HEAT TREATMENT**
- 3. SANITIZE TRAILERS IN THE QUARANTINE AREA PRIOR  
TO MOVING TREATED MATERIAL**



# WSDA SPECIAL PERMIT - HEAT TREATMENTS

## OPTION 1: THERMOPHILIC PHASE OF COMPOSTING

(A) 131°F FOR 2 WEEKS OR,  
(B) 149°F FOR 1 WEEK OR,  
(C) ENCLOSED COMPOSTING FACILITIES, 140°F FOR 1 WEEK.

A MINIMUM NUMBER OF TURNINGS MAY BE REQUIRED

MINIMUM MOISTURE CONTENT OF 40%.

## OPTION 2: DIRECT HEAT TREATMENT

(A) TO 165°F FOR 4 HOURS OR,  
(B) 176°F FOR 2 HOURS OR,  
(C) 194°F FOR 1 HOUR USING WET HEAT.





# **SB 6055 2017-2018 LEGISLATIVE SESSION**

**PILOT PROGRAM FOR OUTDOOR BURNING FOR CITIES AND TOWNS  
PARTIALLY INSIDE A QUARANTINE AREA FOR APPLE MAGGOT.  
EXPIRES JULY 1, 2020.**

- **ALLOWS MATERIAL FROM AM IMPACTED CITIES TO BURN WITHIN THE URBAN GROWTH AREA (UGA)**
- **MUST BE CONDUCTED BY CITY OR TOWN EMPLOYEES, CONTRACTORS UNDER SUPERVISION OR BY LOCAL FIRE OFFICIALS**
- **MUST BE SUPERVISED BY FIRE OFFICIALS**
- **LIMITED TO 4 TIMES PER YEAR**
- **MUST ISSUE A MEDIA ADVISORY PRIOR TO BURNING**

**DID NOT INCLUDE MATERIAL FROM WITHIN THE UGA, BUT OUTSIDE THE CITY.**



# COMPOSTING – NEW, EXISTING AND BACK YARD

FINISHED COMPOST (WAC 173-350-100)  
DOES NOT NEED A SPECIAL PERMIT

MGW MAY NEED SPECIAL PERMIT TO  
REACH COMPOSTER, WHICH REQUIRES  
HEAT TREATMENT

COMMUNITIES ENCOURAGING BACK YARD AND  
COMMUNITY COMPOST





# STEAM TREATMENT WSU PUYALLUP EXTENSION PILOT PROJECT





# STEAM TREATMENT OKANOGAN COUNTY

**USE A ROLL-OFF CONTAINER FOR STEAMING**

**HEAT TREAT AS NEEDED SPRING — FALL**

**SEPARATE GREEN AND WOODY WASTE INTO BUNKERS**

**CHIP AND MIX FOR EVEN HEAT**



Image Source: <https://commons.wikimedia.org/wiki/File:Roll-Off.jpg>  
[https://commons.wikimedia.org/wiki/File:Metnow\\_Valley\\_SE\\_of\\_Twisp\\_WA.jpg](https://commons.wikimedia.org/wiki/File:Metnow_Valley_SE_of_Twisp_WA.jpg),



# **RE-CAP**

**APPLE MAGGOT IS A PEST THAT IMPACTS WASHINGTON'S FRUIT INDUSTRY.**

**THE APPLE MAGGOT QUARANTINE RESTRICTS MUNICIPAL SOLID WASTE AND GREEN WASTE MOVEMENT.**

**SOLUTIONS INCLUDE:**

**WSDA SPECIAL PERMIT TO MOVE MGW AND MSW  
COMPOSTING**

**(RESIDENTIAL, COMMUNITY, NEW COMMERCIAL FACILITIES, MOVE WASTE TO EXISTING FACILITIES)**

**CONTINUING INNOVATION IN HOW TO TREAT MGW AND MSW FOR AM INFESTATION.**





**APPLE MAGGOT** IS A PEST THAT THREATENS WASHINGTON'S  
WAY OF LIFE

QUARANTINE AREAS SLOW THE PEST, BUT WILL CONTINUE TO  
**SPREAD**

PARTNERSHIPS BETWEEN STATE AND LOCAL GOVERNMENTS,  
AND NEW IDEAS WILL  
**KEEP WASHINGTON'S WASTE MOVING**



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