



WEST VIRGINIA SOLID WASTE MANAGEMENT BOARD

601 57th St. SE
Charleston, WV 25304
(304)926-0448

Earl Ray Tomblin, Governor
Mark D. Holstine, PE, Executive Director
www.state.wv.us/swmb

July 15, 2020
Kim Parsons, Chairman
Putnam County Solid Waste Authority
P.O. Box 46
Winfield, WV 25213

Dear Ms. Parsons:

The amended Putnam County Commercial Solid Waste Facility Siting Plan update was approved at the July 15, 2020 meeting of the West Virginia Solid Waste Management Board (SWMB). Your Authority must now submit four copies of your final plan, along with one copy in an electronic format, to the SWMB. A copy of this letter should be included in all copies of the final plan.

In addition, each authority shall transmit one copy of the plan to each appropriate regional planning and development council, county commission and to the office of each appropriate county clerk, who shall file the plan in the appropriate manner and make it available for public inspection.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in blue ink, reading "Carol Ann Throckmorton".

Carol Ann Throckmorton
Environmental Resource Specialist III

Putnam County Solid Waste Authority

Commercial Solid Waste Facility Siting Plan

October 2019

A handwritten signature in cursive script, reading "Wayne Bennett", is positioned above a horizontal line.

Mr. Wayne Bennett
Putnam County Solid Waste Authority Vice Chair

Table of Contents

Siting Information Sources	3
Introduction, Procedures	4
Solid Waste Capacity Requirements for Putnam County	5
Solid Waste Zones and Siting Rationale	6
Class A,B,C & D Facilities	6
Transfer Stations	8
Recycling Facilities	9
Energy Recovery and Incineration Facilities	10
Materials Recovery Facilities	11
Composting Facilities	11
Provisions of Comprehensive Litter and Solid Waste Control Plan	12
Amendment Process	13
Five Year Review	13
Conclusion	14
 Putnam County Solid Waste Facility Zoning Maps	
Class A, B, C & D Landfills	
Transfer Stations	
Recycling Facilities	
Material Recovery Facilities	
Commercial Composting Facilities	
 Public Notice/Affidavit of Publication	
 Public Comments and Responses	
 Board Minutes on Approval of Plan	

SITING INFORMATION SOURCES

The following information was obtained from the following information resources.

Topographical Quad Maps

FEMA Mapping of Putnam County Ground Water Mapping of Putnam County

Historical and Archeological Maps

Oil and Gas Reports

Mineral Resources

Coal Bed Maps

Hydrology

Kanawha River Basin Atlas

D.G.H. Highway Map Putnam County

INTRODUCTION

This plan has been prepared to comply with the standards established by the Solid Waste Management Board for commercial solid waste facility siting. The purpose of the plan is to protect the public health, safety, and environment and to ensure the fair and equitable evaluation of all sites proposed for use as commercial solid waste facilities. The plan will be in effect for twenty years and will be updated every five years.

PROCEDURES

The rationale for zoning used in the plan was in accordance with the guidelines in the Title 54 Legislative Rules, Solid Waste Management Board, Series 4: Commercial Solid Waste Facility Siting Plans. In developing this siting plan, it was the intention of the Authority to provide for current and future waste disposal needs of Putnam County. Unless readily available information clearly established that an area was suitable for the location of a solid waste facility, or conversely, not suitable for a facility, the area was marked tentatively prohibited. The criteria used for developing siting zones includes:

- The efficient disposal of solid waste, including, but not limited to, all solid waste generated within the county or region, regardless of its origin - the plan describes how the zones established by the plan will ensure the efficient collection, transfer, and disposal of solid waste.
- Economic development — the plan describes how the zones established will have a positive or negative impact on the county or regional economy. It will detail the specific impact on the economy and give a rationale for said impact.
- Transportation infrastructure — the plan will describe how the transportation network will allow or prohibit the efficient transportation of solid waste into or through the established zones. It will address all transportation routes, i.e., roads, river, and rail.
- Property values — the plan will describe how the zones established will have a positive or negative impact on property values.
- Groundwater and surface waters — the plan will describe how the established zones will protect groundwater and surface waters in the area.
- Aesthetic and Environmental Quality. -- the plan will examine the positive or negative impacts the established zones will have on existing aesthetic and environmental conditions. For example, siting a recycling center at a former open dump might enable the reclamation of an unsanitary dump. Factors to be considered are the presence of public parks and recreation areas, state and national forests, and endangered or threatened species.
- Geological and Hydrological Conditions. -- the plan will describe what geological and hydrological conditions prohibit or enable a zone to be suitable for siting a solid waste facility. Some of the factors which the authority shall consider are the existence of any known faults within two hundred (200) feet of the area, or other extreme hydrological or geological conditions, e.g., karst regions, solution cavities, extensive sandstone aquifers, shales, consolidated formations, aquitards, and the existence of any mining in the area. If the readily available information clearly establishes that any such conditions will cause a significant adverse impact on ground or surface water quality, the authority shall designate the area as prohibited for landfills.
- The Public Health, Welfare, and Convenience — the plan will describe how the established zones will protect the public health, welfare, and convenience, and still allow for the proper collection, transportation, and disposal of solid waste.

The Putnam County Solid Waste Authority bases its decision to prohibit a solid waste facility in a particular zone upon one or more of these criteria. A decision to authorize a solid waste facility in a particular zone is made only after consideration of all criteria listed.

SOLID WASTE DISPOSAL CAPACITY REQUIREMENTS FOR PUTNAM COUNTY

According to waste projections by the WV Solid Waste Management Board, based on a 4.43 lb. per person per day rate established in a recent waste characterization study by the USEPA titled, *Municipal Waste Generation Recycling, and Disposal in the United States: Facts and Figures for 2010* and population projections from the Bureau of Business and Economic Research at West Virginia University based on the 2010 Census data, Putnam County's waste disposal needs over the next twenty years are as follows:

	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
Monthly Waste Projections	3,835	3,885	3,900	3,889	3,910

According to a survey by the Solid Waste Management Board, in 2016 Sycamore Landfill processed an average monthly tonnage of 5,714. The facility is permitted for 20,000 tons a month so it is running at approximately 29% of capacity. Sycamore Landfill has been acquired by Republic Services.

Disposal Services reported an anticipated life span of approximately 70 years. In 2016, they managed an average monthly tonnage of 6,771. The facility is permitted for 20,000 tons of waste per month and is running at approximately 34% of capacity.

The City of Charleston's Landfill processed a monthly average of 18,391 tons. The facility is permitted for 24,157 tons per month and is running at approximately 76% of capacity. Lifespan expectancy is estimated for 11 years.

According to the best available information, Putnam County's waste needs will fall within the available capacity of local facilities for the next twenty years.

SOLID WASTE ZONES AND SITING RATIONAL

SOLID WASTE FACILITY DEFINITIONS

I. CLASS A SOLID WASTE FACILITY

"Class A facility" means a commercial solid waste facility which handles an aggregate of between ten and thirty thousand (10,000-30,000) tons of solid waste per month. "Class A facility" includes two or more Class B solid waste landfills owned or operated by the same person in the same county, if the aggregate tons of solid waste handled per month by such landfills exceeds nine thousand nine hundred ninety-nine (9,999) tons of solid waste per month.

II. CLASS B SOLID WASTE FACILITY

"Class B facility" means a commercial solid waste facility which receives, or is expected to receive, an average daily quantity of mixed solid waste equal to or exceeding one hundred (100) tons each working day; or serves, or is expected to serve, a population equal to or exceeding forty thousand (40,000) persons, but which does not receive solid waste exceeding an aggregate of ten thousand (10,000) tons per month. "Class B facility" does not include construction/demolition facilities: Provided, That the definition of Class B facility may include such reasonable subdivisions or subclassifications as the director may establish by legislative rule proposed in accordance with the provisions of W. Va. Code §29A-1-1 et seq.

III. CLASS C SOLID WASTE FACILITY

"Class C facility" means a commercial solid waste facility which receives, or is expected to receive, an average daily quantity of mixed solid waste of less than one hundred (100) tons each working day; and serves, or is expected to serve, a population of less than forty thousand (40,000) persons. "Class C facility" does not include construction/demolition facilities.

IV. CLASS D SOLID WASTE FACILITY

"Class D facility" means any commercial solid waste facility for the disposal of only construction/demolition waste, and does not include the legitimate beneficial reuse of clean waste concrete/masonry substances for the purpose of structural fill or road base material.

V. WASTE TIRE MONOFILL

A Monofill means an approved solid waste facility where waste tires not mixed with any other waste are placed for the purpose of long term storage for eventual retrieval for marketing purposes.

Prohibited Zones

Prohibited zones are areas where the readily available information establishes that placement of a Class A, B, C, or D facility is unsuitable. The authority prohibits the placement of this type of facilities in any of these zones.

1. The areas along the Kanawha and Pocatalico River and the confluence of their tributaries are prohibited because they lie in the 100-year flood plain and possess alluvial aquifers.
2. Areas along or near any major proposed airport.
3. Areas inside municipalities or near heavily populated areas of Putnam County.
4. Areas that would substantially degrade historic, cultural or recreational centers.

The following prohibitions applicable to landfills are specified in 54CSR4 and in the case of airports, 49USC §44718(d),

- Within three hundred (300) feet of any surface water (facility drainage or sedimentation control structures are exempt from this distance calculation);
- Within three hundred (300) feet of any wetlands (facility drainage or sedimentation control structures are exempt from this distance calculation);
- Within a perennial stream;
- Within a 100-year floodplain;

- Within twelve hundred (1,200) feet of any public or private water supply well in existence at the time the zone is established.
- Within 200 feet of any known fault or other extreme hydrological or geological conditions
- Municipal solid waste landfills are prohibited within 6 miles of an airport, 49USC §44718(d).
- Within 1,000 feet of the nearest edge of the right-of-way of any state trunk highway, interstate, or federal aid primary highway, or the boundary of any public park.
- Within 500 feet of an occupied dwelling.

Tentatively Prohibited Zones

Tentatively prohibited zones are based upon readily available information that will have to be supplanted by more specific information before it can be classified as either prohibited or approved.

1. Many areas of Putnam County are classified as tentatively prohibited due to soils that exhibit severe flooding and slipping. Many soils are shallow to bedrock.
2. There are large areas of Putnam County that contain active/inactive gas fields and working gas wells. Locations near such operations are tentatively prohibited.

Authorized Zones

Authorized areas include those inside the permitted area for both the DSI and Sycamore Landfill. The two landfills are located near the intersection of State Route 34 and US Route 60. Also authorized is Commercial Waste Tire Monofill located at 263 Sovine Road, Hurricane, WV.

SOLID WASTE TRANSFER STATIONS

"Transfer station" means a combination of structures, machinery, or devices at a place, or facility where solid waste is taken from collection vehicles and placed in other transportation units (such as a "walking floor," or other method of transfer as determined by the director) for movement to another solid waste management facility. Provided, when the initial generator of solid waste disposes of said waste into a container such as a roll-off, greenbox or bin which is temporarily positioned (not more than five days) at a specific location for transport by a transportation unit, such container shall not be considered a transfer station. Under any circumstances, leachate, litter and windblown materials must be properly managed.

Prohibited Zones

None

Tentatively Prohibited Zones

Readily available information suggests much of Putnam County will be zoned as tentatively prohibited. The development of large upscale housing units, increased population density and current access to two commercial landfills are all limiting factors in site selection for new transfer stations.

Authorized Zones

The current permitted location of the St. Albans Transfer Station is authorized.

RECYCLING FACILITIES

"Recycling facility" means any solid waste facility for the purpose of recycling at which neither land disposal nor biological, chemical or thermal transformation of solid waste occurs; Provided, that mixed waste recovery facilities, sludge processing facilities and composting facilities are not considered to be reusing or recycling solid waste within the meaning of W. Va. Code §§20-11-1 et seq., 22-15-1 et seq and 22C-4-I et seq.

§22-15A-23. Recycling facilities exemption.

Recycling facilities, as defined in section two, article fifteen of this chapter, whose only function is to accept free-of-charge, buy or transfer source-separated material or recycled material for resale or transfer for further processing are exempt from the provisions of said article and article four of chapter twenty-two-c and sections one-c and one-f, article two, chapter twenty-four of this code.

Prohibited Zones

None.

Tentatively Prohibited Zones

Unless authorized by the Putnam County Solid Waste Authority recycling facilities that do not qualify for the exemption are tentatively prohibited throughout the county.

Authorized Zones

Locations authorized for recycling include:

1. WV Cashin Recyclables, Nitro Industrial Park, Pickens Road, Nitro, WV

The Authority has determined that temporary placed recycling boxes are not facilities and do not need siting approval as long as no processing of material takes place on site. These are simply collection points. Collection points should be well maintained and complaints about litter or illegal dumping activities connected with collection boxes will be referred by the Putnam County Solid Waste Authority to the Division of Natural Resources or the Department of Environmental Protection. The Authority is still looking for additional recycling drop-off sites in the northern part of the county.

ENERGY RECOVERY FACILITIES AND INCINERATORS

"Energy recovery incinerator" means any solid waste facility at which solid wastes are incinerated with the intention of using the resulting energy for the generation of steam, electricity, or any other use not specified herein.

"Incinerator" means an enclosed device using controlled flame combustion to thermally break down solid waste, including refuse-derived fuel, to an ash residue that contains little or no combustible materials.

Prohibited Zones

Energy Recovery Facilities and Waste Incinerators are banned state-wide as a result of W.Va. Code §22-15-19

Tentatively Prohibited Zones

None

Authorized Zones

None

MATERIALS RECOVERY FACILITY

"Materials recovery facility" means any solid waste facility at which source-separated materials or materials recovered through a mixed waste processing facility are manually or mechanically shredded or separated for purposes of reuse and recycling, but does not include a composting facility.

These types of facilities are best located in industrial zoned areas or near existing landfills.

Prohibited Zones

Residential and retail areas are prohibited zones.

Tentatively Prohibited Zones

Areas zoned industrial, or existing landfill sites are zoned as tentatively prohibited.

Authorized Zones

No areas of Putnam County are authorized for materials recovery facilities.

COMPOSTING FACILITY

"Commercial composting facility", means any solid waste facility processing solid waste by composting, including sludge composting, organic waste or yard waste Composting but does not include a composting facility owned and operated by a person for the sole purpose of composting waste created by that person or such person and other persons in a cost-sharing or non-profit basis and shall not include upon which finished or matured compost is applied for use as a soil amendment or conditioner.

Tentatively Prohibited Zones

Compost facilities are tentatively prohibited throughout all areas of Putnam County. The Authority encourages backyard composting and works with Master Gardeners and the Cooperative Extension Service in promoting and educating proper handling of yard and plant waste.

Approved Zones

None

Prohibited Zones

Residential and retail areas are prohibited zones.

PROVISIONS OF THE COMPREHENSIVE LITTER AND SOLID WASTECONTROL PLAN

The Putnam County Authority believes a viable solid waste management plan is vital to the community's environmental protection and the future of solid waste planning. Putnam County as part of its comprehensive plan views the existing solid waste facilities as critical to the long-term growth of Putnam County. The Authority operates three recycling drop-off locations for recyclables in Winfield, Poca, and Red House. The City of Hurricane also has a drop off location. WV Cashin' has drop off locations in Nitro and Poca.

The two landfills that service our area will provide enough landfill space for Putnam County and the surrounding area for the next twenty years. Over the last two years, waste is being hauled out of state by Republic Services. We estimate 1,000 tons per month of waste is now leaving Putnam County to out of state landfills. The Authority will continue to promote recycling and source reduction as a means of extending the life of our landfills and providing our citizens with waste management alternatives.

AMENDMENT PROCESS

Consideration of Amendments:

The proposed regulations provide for amendments to this siting plan at any time by the Authority. A public hearing is required. Solid Waste Management Board approval is needed before any amendments become effective.

Any person or group may apply to the Authority for an amendment to redesignating a zone or any portion of a zone. The "applicant" has the burden to affirmatively and clearly demonstrate, based on the criteria outlined in this plan, that the requested redesignation is appropriate and proper and that any solid waste facility sited could be appropriately operated in the public interest at the proposed location.

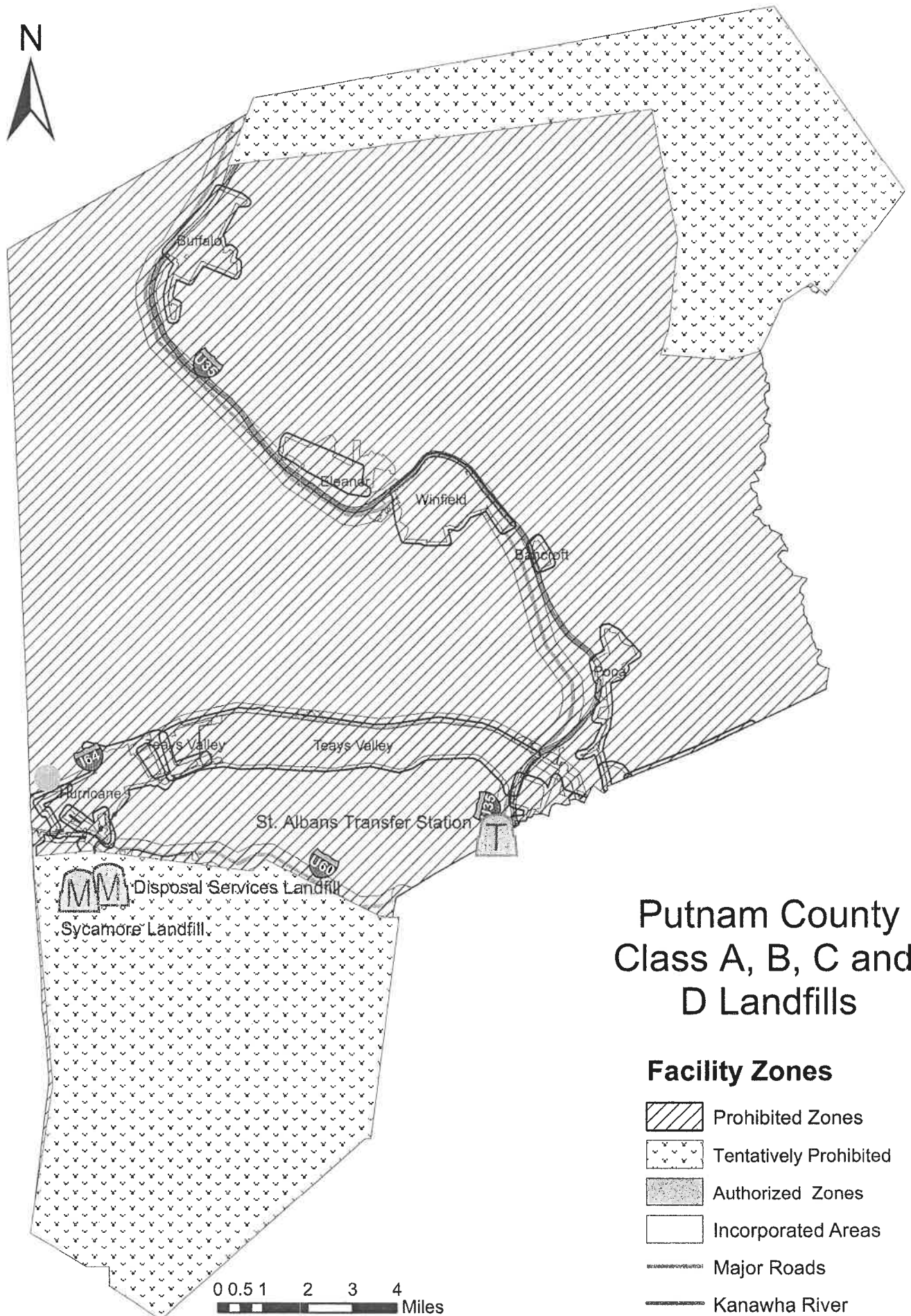
In order to make such a demonstration, the applicant is responsible for making whatever examination is necessary by the Authority and for submitting specific detailed information to the Authority.

FIVE YEAR REVIEW

A five year review is required. The plan must be updated to include the next twenty years after the date of the five year review. A public hearing and board approval is also required.

CONCLUSION

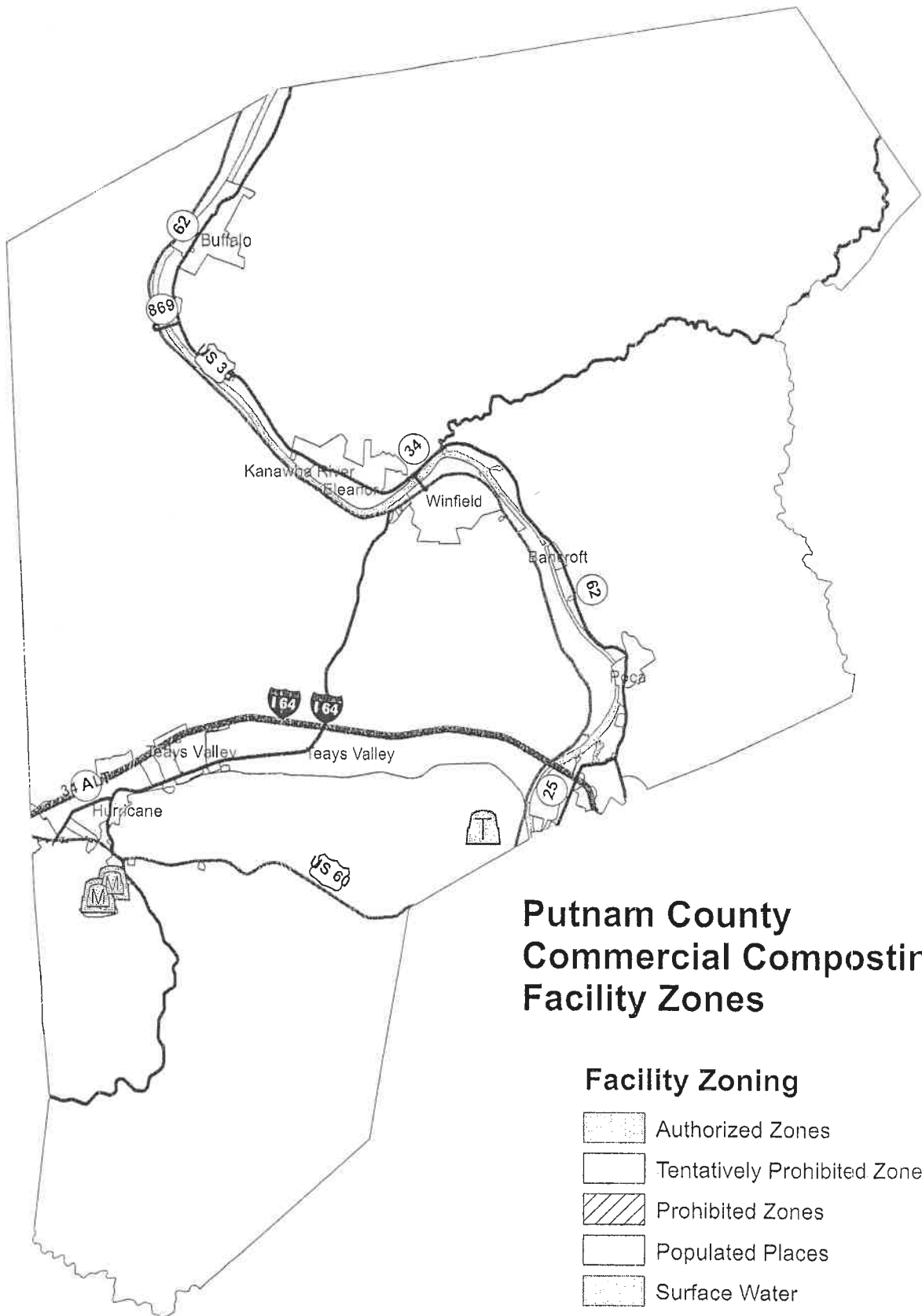
In preparing this plan, the Putnam County Solid Waste Authority has sought to satisfy the intent of the siting regulations and give potential facilities direction on location decisions and siting criteria that need to be considered.



Putnam County Class A, B, C and D Landfills






Facility Zones

-  Prohibited Zones
-  Tentatively Prohibited
-  Authorized Zones
-  Incorporated Areas
-  Major Roads
-  Kanawha River



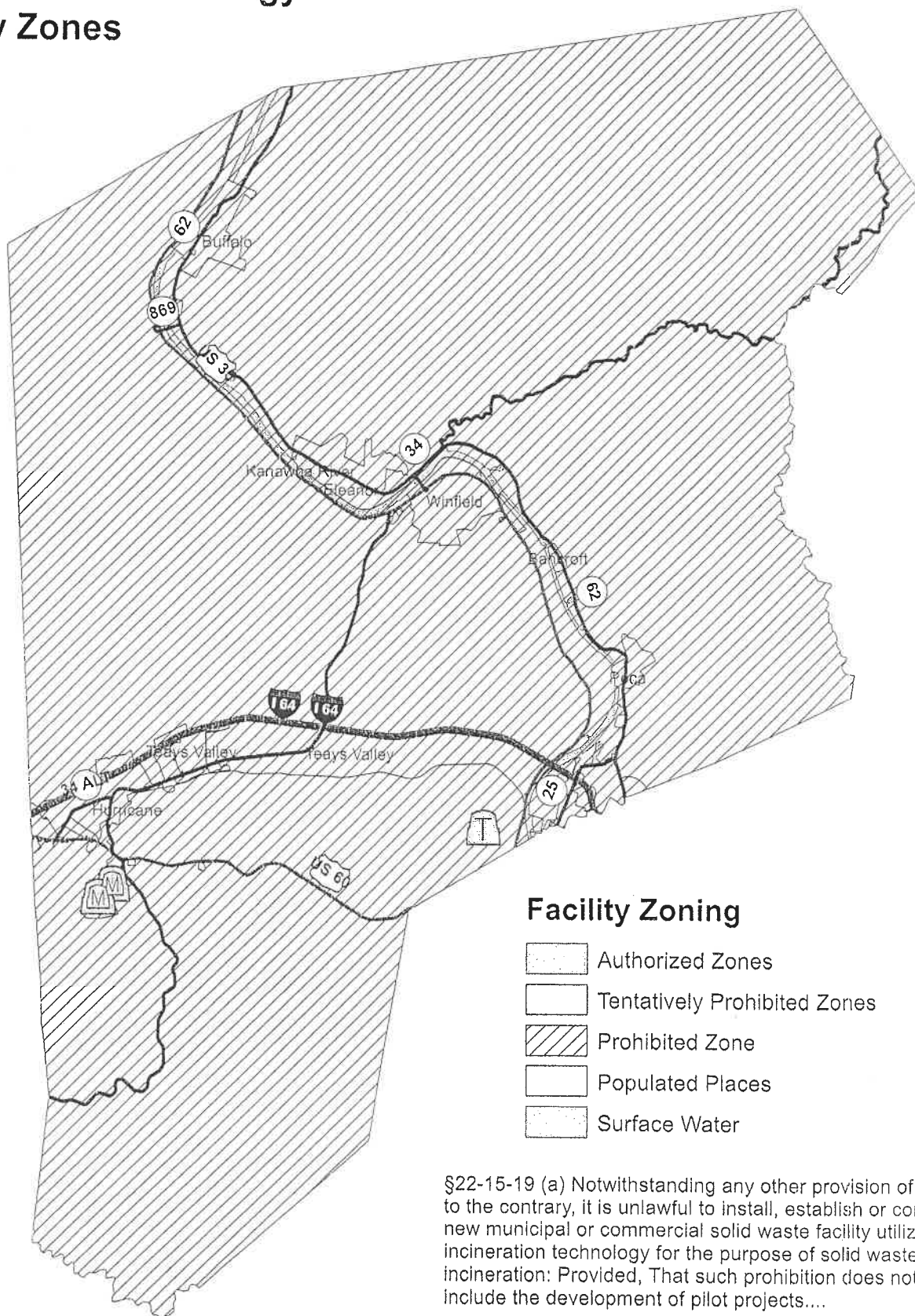
Putnam County Commercial Composting Facility Zones

Facility Zoning

-  Authorized Zones
-  Tentatively Prohibited Zone
-  Prohibited Zones
-  Populated Places
-  Surface Water

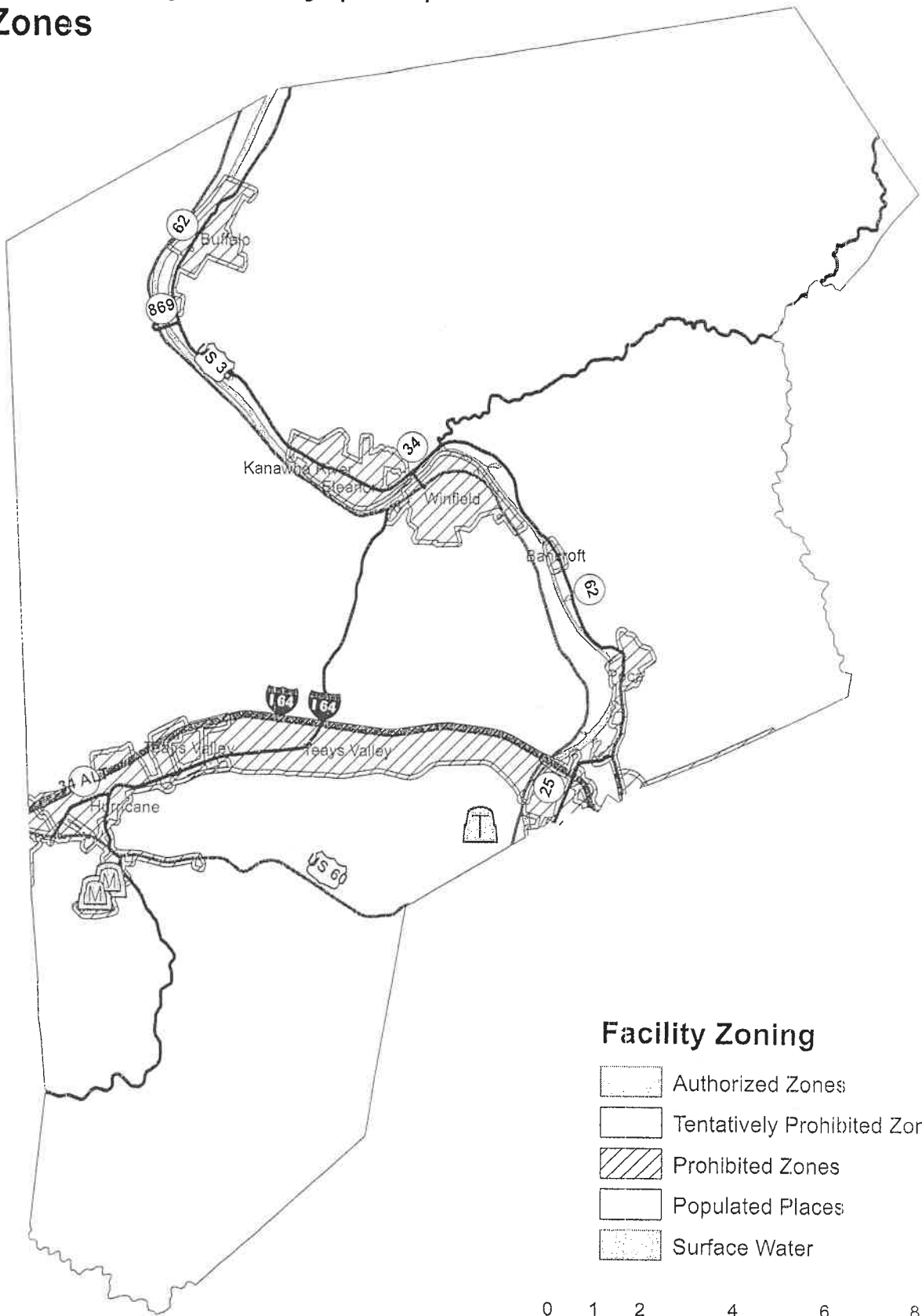
0 1 2 4 6 8 Miles

Putnam County Incineration Technology Facility Zones



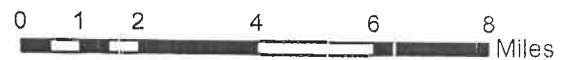
0 1 2 4 6 8 Miles

Putnam County Material Recovery Facility (MRF) Siting Zones

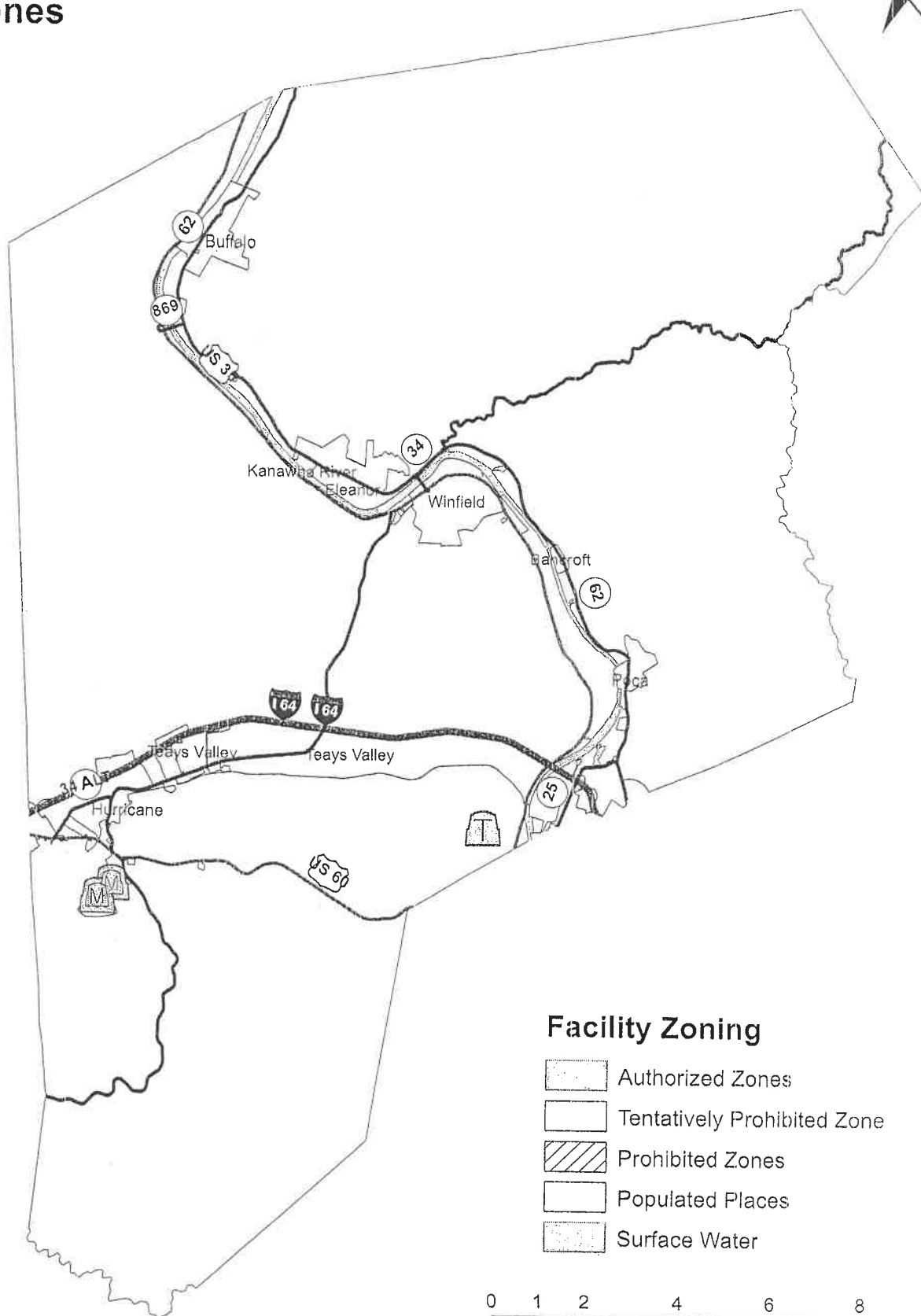


Facility Zoning

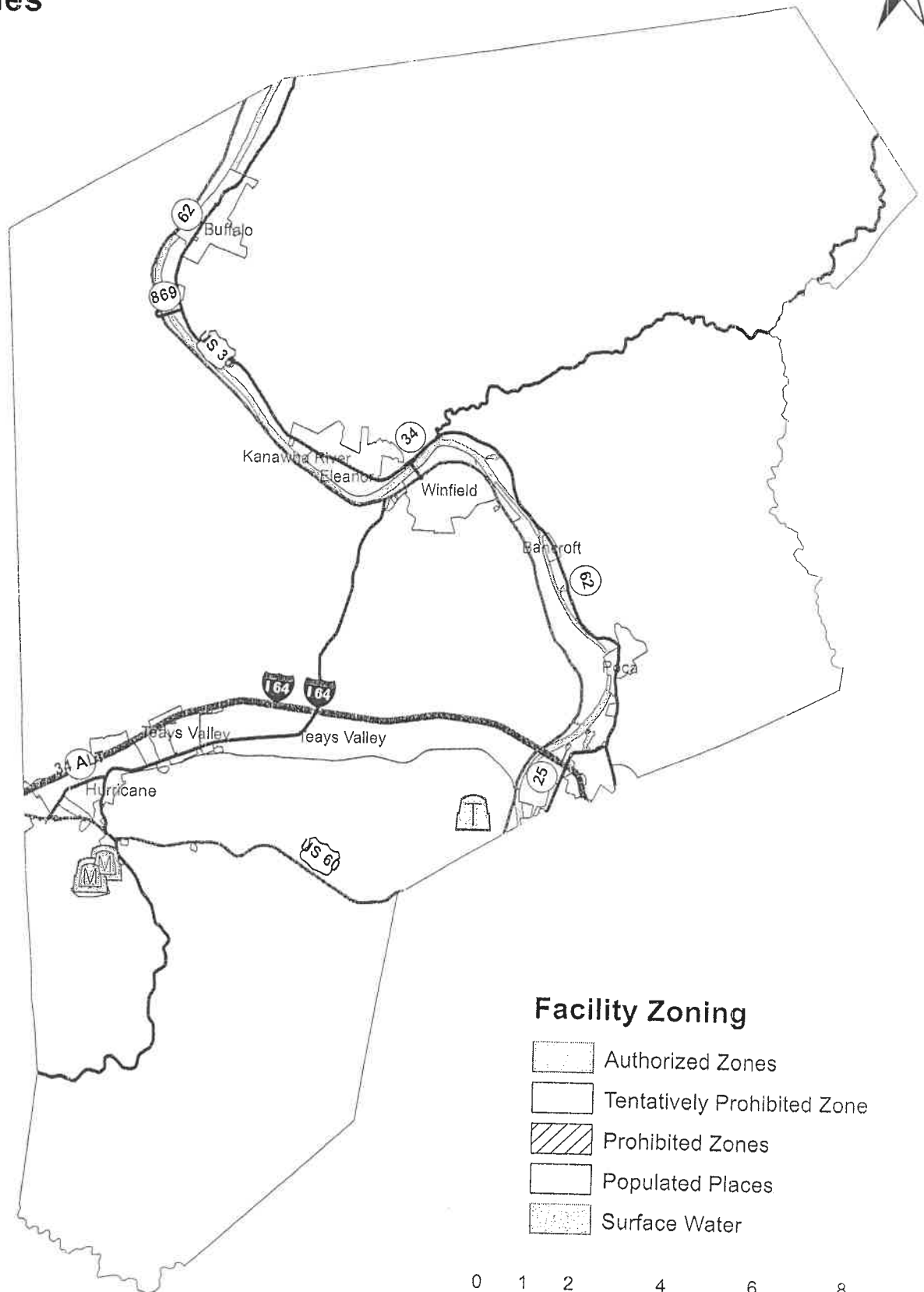
- Authorized Zones
- Tentatively Prohibited Zone
- Prohibited Zones
- Populated Places
- Surface Water






Putnam County Commercial Recycling Facility Zones



Putnam County Transfer Station Siting Zones



Facility Zoning

-  Authorized Zones
-  Tentatively Prohibited Zone
-  Prohibited Zones
-  Populated Places
-  Surface Water



Putnam County Solid Waste Authority
December 9, 2019
Minutes

The Putnam County Solid Waste Authority meeting was called to order by Vice Chairman Wayne Bennett at 4:00 p.m.

Members present: Roger Randolph, Wayne Bennett, Dave Melton

Staff present: Charity Fellure

Guests: None

A public hearing was held on November 22, 2019, at 1:00 p.m., regarding the revisions to the Siting Plan. No comments were made. Mr. Randolph moved to accept the Siting Plan as revised. Mr. Bennett seconded the motion. The motion passed unanimously.

Mr. Randolph moved to adjourn the meeting at 4:15 p.m. Mr. Bennett seconded the motion. The motion passed unanimously. The next meeting will be January 13, 2020, at the Putnam County Solid Waste Authority.

Respectfully submitted,

Charity Fellure, Executive Director

Ad Number 81299

Affidavit of Legal Publication and Posting

STATE OF WEST VIRGINIA

COUNTY OF Kanawha, TO-WIT

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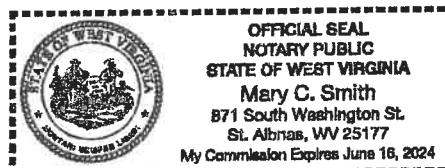
Given under my hand this day 10/29/2019

Sworn to and subscribed before me 10/29/2019
at Charleston, Kanawha County, West Virginia

M. C. Smith

Notary Public of, in and for Kanawha County, West Virginia

MY COMMISSION EXPIRES: June 16, 2024



[Signature]



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**The Putnam County
Solid Waste Authority**

will hold a public hearing concerning an amendment to the Commercial Solid Waste Facility Siting Plan. The hearing will take place at 3232 Winfield Road, Winfield, WV, on November 22, 2019, at 1:00 p.m., during which time public comments will be heard. The plan may be reviewed at the Putnam County Library, the Putnam County Clerk's Office, and the Putnam County Solid Waste Authority office. Written comments will be accepted until December 2, 2019 and may be sent to: Putnam County Solid Waste Authority, PO Box 46, Winfield, WV 25213 or charity.fellure@pcswa.org.

LC-81299
10-22,29;2019

PUBLIC HEARING

**PUTNAM COUNTY SOLID WASTE AUTHORITY
3232 WINFIELD ROAD
WINFIELD, WV 25213**

November 22, 2019

Attendance: Wayne Bennett, Charity Fellure, Shannon Simmons

Mr. Wayne Bennett, Vice Chairman of the Putnam County Solid Waste Authority, declared the hearing open at 1:00 p.m. on November 22, 2019.

Public hearing held at the office of the Putnam County Solid Waste Authority, Winfield, WV; properly advertised legal notice in the Charleston Newspaper. Certificate of Publication duly noted, notarized, and made part of this record.

The purpose of the public hearing was in regards to changes in the Siting Plan due to Mr. Simmons opening a monofill to be located at 263 Sovine Road, Hurricane, WV. The revisions are on pages 5 and 7 of the Siting Plan. The revised plan was available for review. After some discussion regarding the plan, it was decided that no revisions needed to be made. No further comments were brought before the Board. Mr. Bennett set forth that written comments can be received from the public until December 2, 2019.

Mr. Bennett declared the public hearing closed at 3:45 PM.