

International Paper Closure: Impact on Groundwater Resources

Presented to: Hampton Roads Planning District Commission

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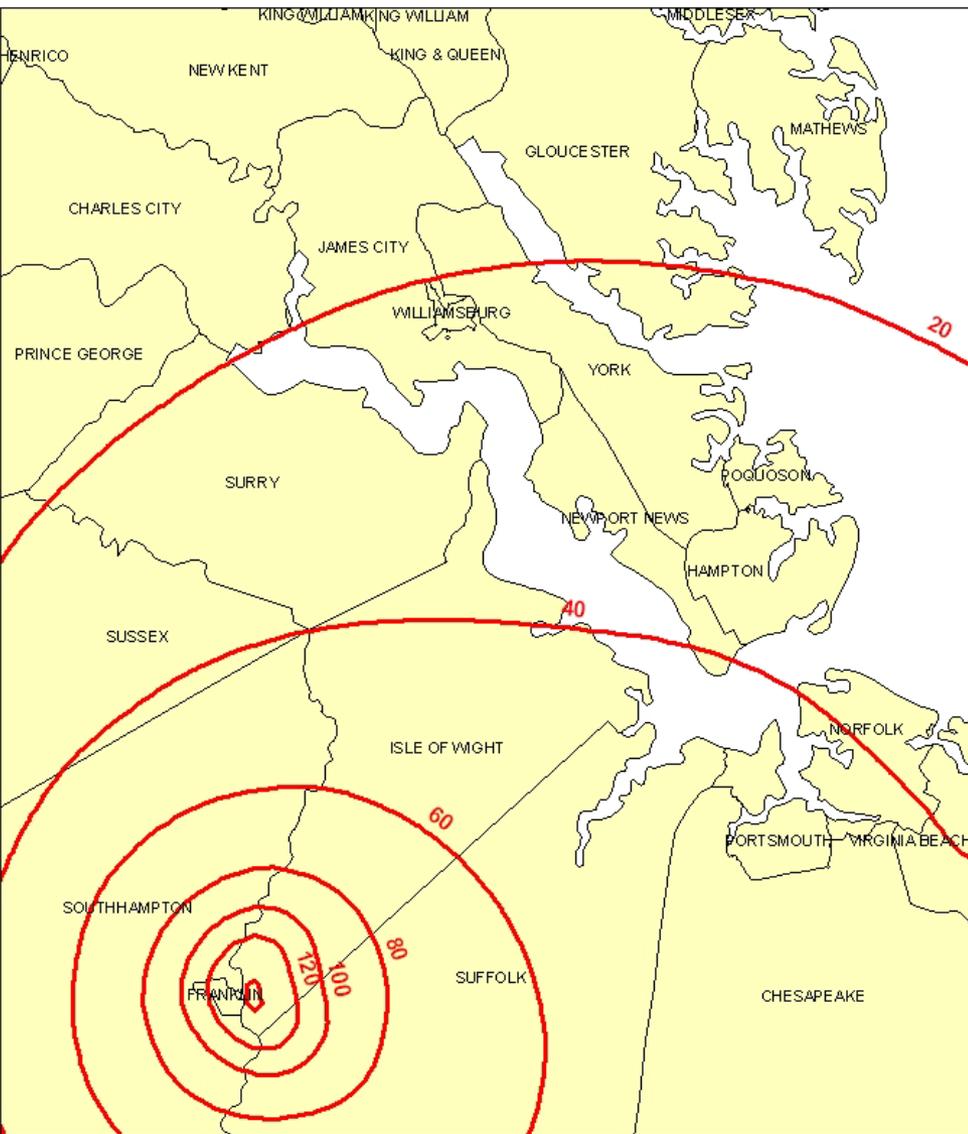


Groundwater Withdrawal Permit

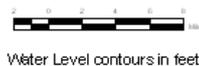
- All groundwater withdrawals over 10,000 gallons per day require a permit.
- International Paper holds the largest withdrawal permit in the region.
- Permit allows IP to withdraw up to 37 million gallons per day.
- In 2008, IP reported withdrawing 33 million gallons per day.

Status of Permit

- International Paper's permit expires January 2010.
- IP applied to renew its permit in the spring and has not withdrawn its request for renewal.
- Permit can be transferred to a new owner with the consent of the State Water Control Board.
- Permit must be amended if new owner wants to use water for a different beneficial use.



INTERNATIONAL PAPER
 PERMITTED WITHDRAWALS
 DRAWDOWN (FT)
 MIDDLE POTOMAC AQUIFER



- IP's withdrawals impact water levels throughout the region.
- USGS and DEQ installed additional equipment to monitor the change in water levels as IP stops pumping.

Over Allocated Resource

Number of model cells violating DEQ's technical criteria		
	With International Paper's withdrawals	Without International Paper's withdrawals
Yorktown-Eastover	3	1
Chickahominy-Piney Point	15	10
Aquia	22	12
Upper Potomac	2	0
Middle Potomac	12	5

Based on DEQ's criteria, the groundwater system is currently over allocated and will still be over allocated when International Paper stops withdrawing water.

Groundwater Availability

- International Paper's permit was never evaluated based on the technical criteria because it was grandfathered.
- A new permit for the same amount of water would not pass the technical evaluation.
- Ideally, a new owner of the IP facility would use less water than IP.
- Local governments should not expect all of the groundwater permitted to IP to be available to renew their groundwater withdrawal permits at the current amounts or more.

Next Steps

- **International Paper closure**
 - HRPDC staff can evaluate the groundwater issues associated with economic development proposals.
- **Regulatory Changes**
 - Groundwater Regulatory Advisory Panel has been meeting since September to review the current regulations.
 - HRPDC and USGS staff are analyzing the permitted withdrawals with a new groundwater model published this year.
 - Staff will provide updates on regulatory changes that may impact the permits held by local governments.