This is a set of slides from a presentation given at

Water & Energy
In Maryland

2010 Water Resources Symposium
hosted by the Maryland Water Resources Research Center
at the University of Maryland, College Park
on Thursday, Oct. 28, 2010

The presentation is Copyright © 2010 Joseph K. Hoffman.

Any quotations from or references to this material should be cited as follows:


For further information or for permission to use large portions of this material, contact the author directly:

Joseph K. Hoffman
Executive Director
Interstate Commission on the Potomac River Basin
JHoffman@ICPRB.org

(all contact information current as of Oct. 2010)
COMPETING WATER, ENERGY AND LAND USES IN MARYLAND

University of Maryland
Water Resources Research Institute
Symposium
October 28, 2010

JOSEPH K. HOFFMAN
EXECUTIVE DIRECTOR
INTERSTATE COMMISSION ON THE
POTOMAC RIVER BASIN
TODAY’S POINTS

- Water Not Limitless
- ICPRB and CO-OP Section
- Maryland Water Rights
- Water Conflicts
- Water Availability
- Consumptive Use
- Future Actions
ICPRB

Created 1940
5 Members + U.S.
18 Commissioners
+ 18 Alternates
20 +/- Staff
Non-regulatory
River as boundary
Tributaries cross borders
CO-OP SECTION

- Special Section Authorized in Compact
- Created 1979
- Governed by LFAA & WSCA
- Three Utilities – “Operations Committee”
- Manage Metro Supply During Drought
  - Five Year Demand Studies
  - Annual Drought Exercise
  - Technical Support/Advise/Assistance
  - Negotiation w/ Power Utilities (CPCN Process)
WATER CONFLICTS
(REAL AND POTENTIAL)

➢ WATER AVAILABILITY
  • Location, use, timing and quantity
  • Water Rights
  • Economics
  • Certainty

➢ CONSUMPTIVE USE

➢ DROUGHT PERIODS

➢ MARCELLUS SHALE
  • Quality and quantity issues
DEMOGRAPHICS & WATER SUPPLY

Population:
- Basin: 6.1 Million (Est 2010)

Average Metro Use: 487 MGD
- 391 MGD Potomac
- Remainder from reservoirs (Patuxent/Md & Occoquan/Va)

Avg Flow: 7 Billion Gal/Day (7,000 MGD)
Potomac Basin Water Use

Thermo-Electric Power Withdrawal and Consumptive Use

MGD

2005 2010 2015 2020 2025 2030

SW Consumptive
GW Consumptive
SW WD
GW WD
## Potomac Basin Water Use

<table>
<thead>
<tr>
<th>Sector</th>
<th>Withdrawal 2010 (MGD)</th>
<th>Withdrawal 2030 (MGD)</th>
<th>Consumptive Use 2010 (MGD)</th>
<th>Consumptive Use 2030 (MGD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture (AG)</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Domestic and public supply (DP)</td>
<td>942</td>
<td>2,406</td>
<td>444</td>
<td>1,031</td>
</tr>
<tr>
<td>Industrial (IN)</td>
<td>91</td>
<td>119</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Mining (MI)</td>
<td>37</td>
<td>39</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Power (PO)</td>
<td>3,275</td>
<td>3,899</td>
<td>98</td>
<td>117</td>
</tr>
</tbody>
</table>
WATER WITHDRAWALS

- Domestic use accounts for 22% of withdrawals and 79% of consumptive use.
- Power (cooling water) accounts for 75% of withdrawals and 18% of consumptive use.
- Agriculture, Industrial, and Mining together account for 3% of withdrawals and consumptive loss.
- Power generated outside Potomac.
CONTACT

- JOSEPH HOFFMAN, Executive Director, ICPRB
- TELEPHONE: 301-274-8126
- EMAIL: jhoffman@icprb.org
- WEBSITE: www.potomacriver.org
- GENERAL INQUIRIES: info@icprb.org
- BIMONTHLY NEWSLETTER: Potomac Basin Reporter
- (Library: 8,000 +/- Volumes -- info@icprb.org)