

Update on Water Quality Standards Attainment Indicator

Peter Tango (USGS/CBPO)
Qian Zhang (UMCES/CBPO)
with contributions from Richard Tian

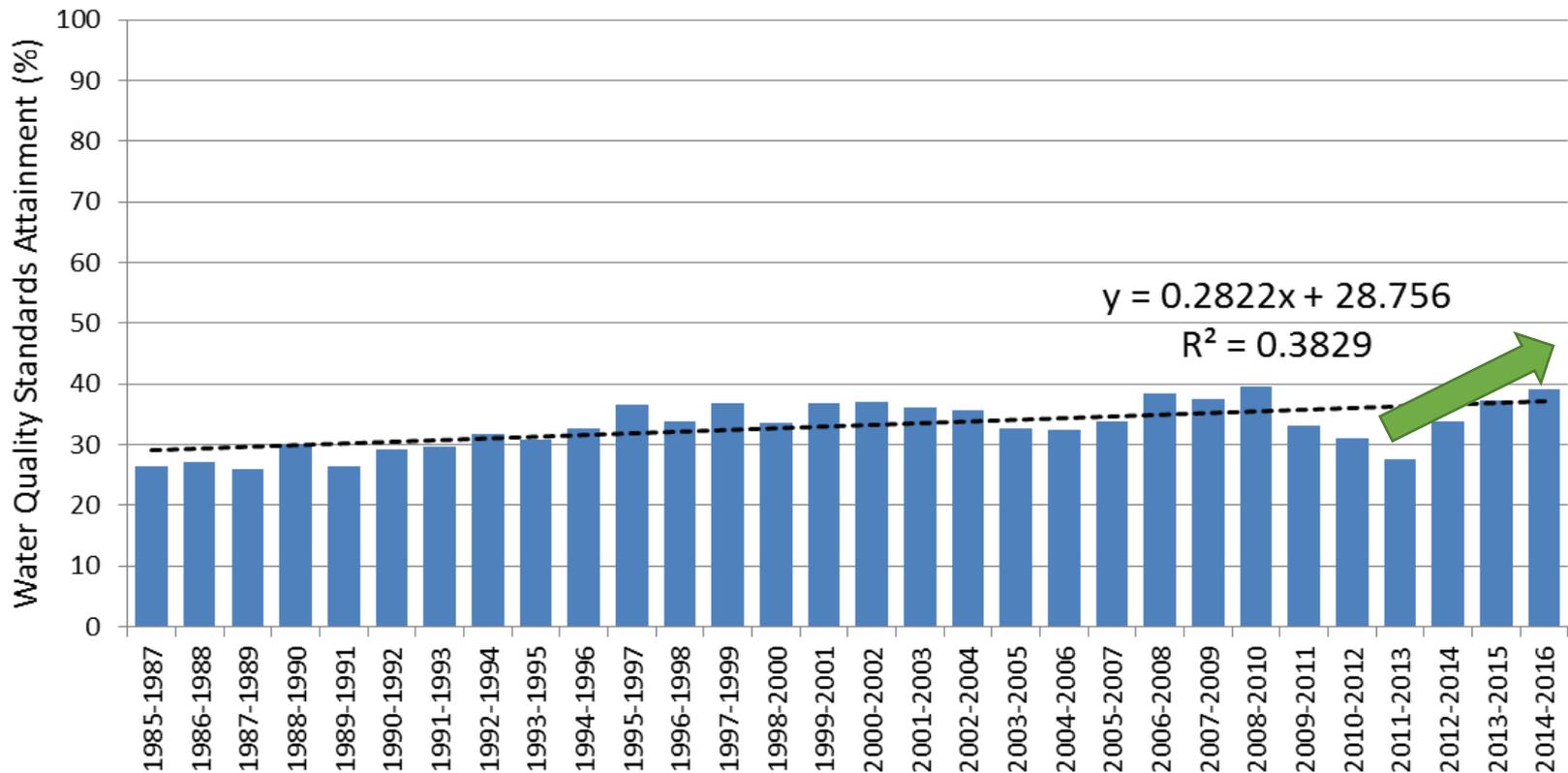
Status & Trend Workgroup
September 12, 2017



Water Quality Criteria Attainment Indicator

1985-2016

Achievement of Chesapeake Bay Water Quality Standards 1985-2016



(pending revision with states data on clarity)

Water Quality Criteria Attainment Indicator

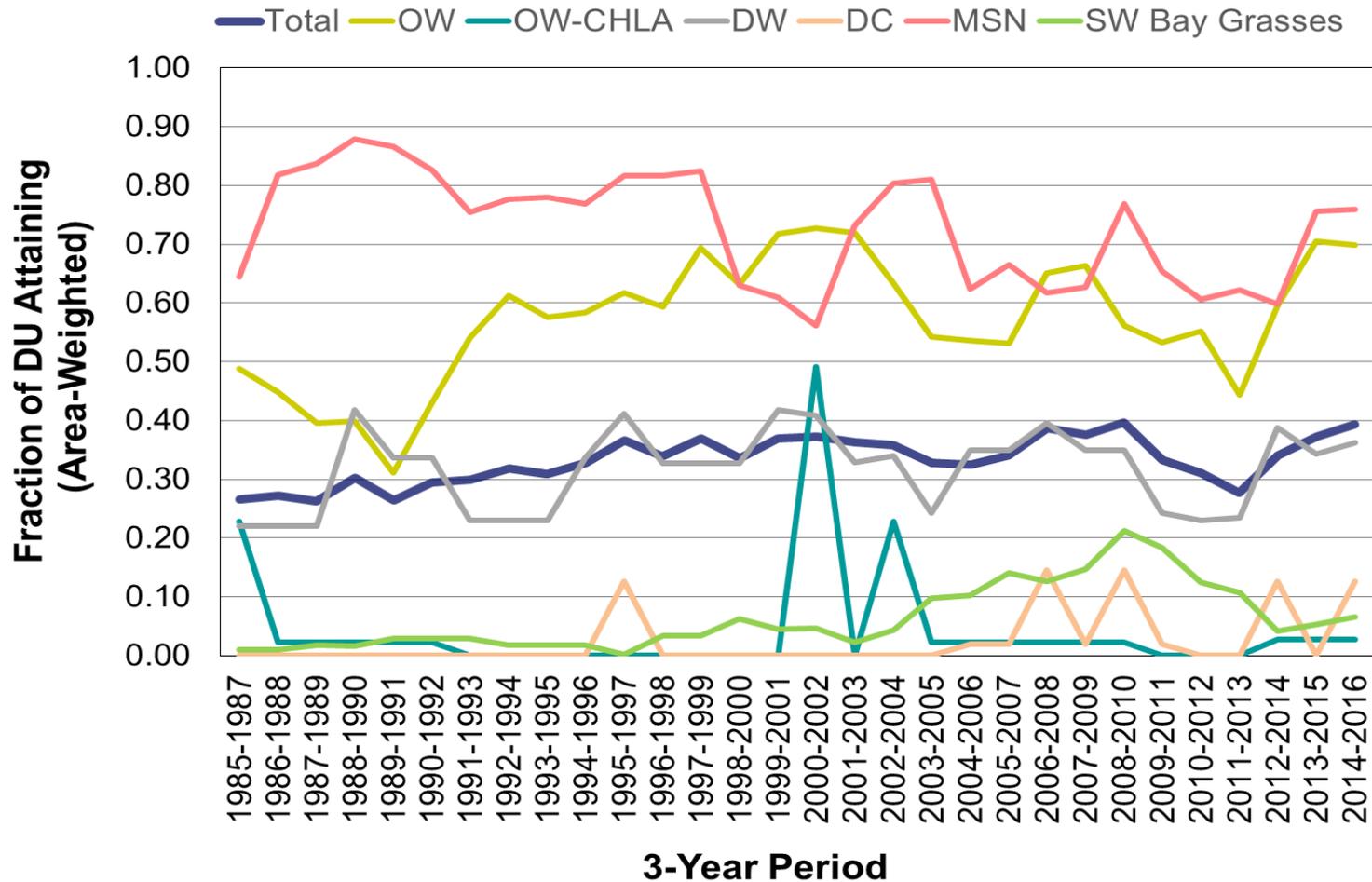
1985-2016

3-yr period	Attainment (%)	3-yr period	Attainment (%)
1985-1987	26.5	2000-2002	37.2 ⁵
1986-1988	27.2	2001-2003	36.2
1987-1989	26.1	2002-2004	35.7
1988-1990	30.1	2003-2005	32.7
1989-1991	26.4	2004-2006	32.4
1990-1992	29.3	2005-2007	33.9
1991-1993	29.8	2006-2008	38.5 ³
1992-1994	31.8	2007-2009	37.4 ⁴
1993-1995	30.8	2008-2010	39.5 ¹
1994-1996	32.7	2009-2011	33.2
1995-1997	36.5	2010-2012	31.0
1996-1998	33.9	2011-2013	27.6
1997-1999	36.9	2012-2014	33.9
1998-2000	33.5	2013-2015	37.2 ⁵
1999-2001	36.8	2014-2016	39.2 ²

(pending revision with states data on clarity)

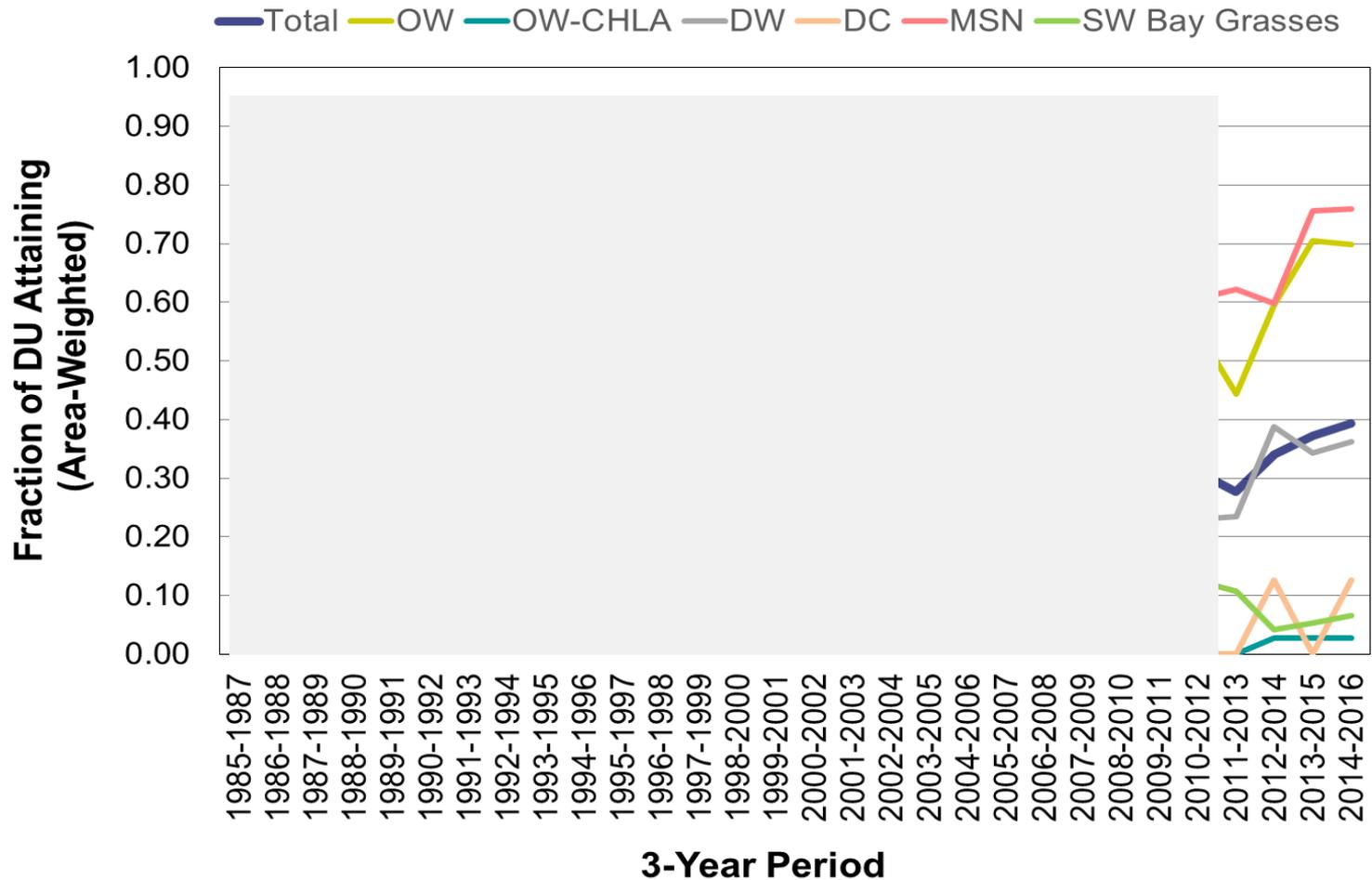
Water Quality Criteria Attainment Indicator By Designated Use

Attainment by Designated Use 1985-2016



Water Quality Criteria Attainment Indicator By Designated Use

Attainment by Designated Use 1985-2016



June WQGIT Meeting: Recommended Actions

- Extract **more information** from WQS attainment assessment, including exploration of “**percent to attainment**” and perhaps “**beyond capacity.**”
- Our focus is to provide **complementary information** to the existing attainment indicator (NOT to replace it!)
- We will work with the **communications team** on products development.
- (**New**) We also propose to work with the ITAT team to
 - a) Synthesize bay-wide segment-level **attainment patterns.**
 - b) Synthesize bay-wide station-level **WQ GAM trends.**
 - c) Synthesize historical **watershed inputs** to each segment.
 - d) Establish linkages (or lack of): (a) → (b) → (c).