DIGITAL DOCUMENT ACCESSIBILITY

Create accessible Microsoft **Word** documents, and convert them to accessible, tagged **PDF** documents







TODAY'S CLASS

- Background
- What makes a document accessible?
- Creating accessible Word documents
- Converting to PDF
- Checking a PDF for accessibility
- End notes

BACKGROUND: TYPES OF DISABILITIES (1/3)

- Many types of disabilities may be challenged by a document:
 - VISUAL

blindness, color-blindness, low vision, trouble with low contrast, small print, etc.

BACKGROUND: TYPES OF DISABILITIES (2/3)

	Normal Vision	L-cone defect	M-cone defect	S-cone defect
Men	91.4%	2.45%	6.1%	0.011%
Women	99.6%	0.04%	0.36%	0.04%
Overall	95.5%	1.25%	3.24%	0.025%

Red Orange Yellow Green Blue Magenta Red Orange Yellow Green Blue Magenta Red Orange Yellow Green Blue Magenta Red Orange Yellow Green Blue Magenta

BACKGROUND: TYPES OF DISABILITIES (3/3)

- MOTOR
 physical impairments, conditions
- COGNITIVE cognition, memory, attention, learning...
- LITERACY LEVEL
 "50% of Americans read at 8th grade level or lower"; English learners

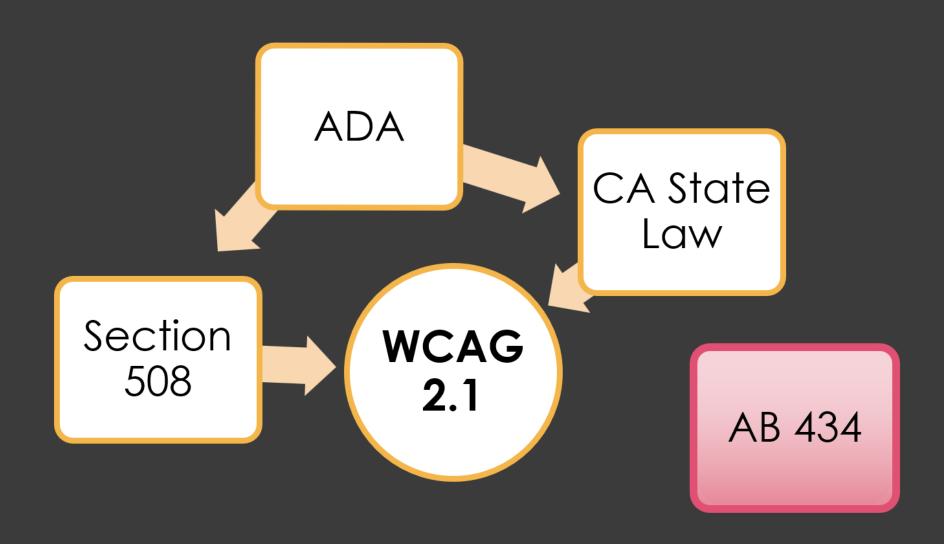
BACKGROUND: ASSISTIVE TECHNOLOGIES

- Hardware; mouse replacements
- Software, tools within software, magnifiers, language/text translation
- Screen reader DEMO
- Navigation options:
 by headings, links list, images list

BACKGROUND: LAWS & POLICIES (1/2)

- State and federal laws and policies require that any web content we or our contracted agents produce can be accessed equally by all citizens, regardless of ability.
- W3C's Web Content Accessibility Guidelines (WCAG) 2.1 Level A/AA
- Applies to external AND internal content

BACKGROUND: LAWS & POLICIES (2/2)



BACKGROUND: WCAG

Principles

- Perceivable
- Operable
- **U**nderstandable
- Robust

WCAG Success Criteria

WHAT MAKES A DOCUMENT ACCESSIBLE?



California Department of Fish and Game 20 Lower Ragsdale Drive, Suite 100 Monterey, CA 93940



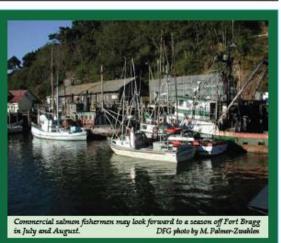
2010 Salmon Seasons Determined for California

by Mary Patyten, Research Writer

The Pacific Fishery Management Council (PFMC) and the California Fish and Game Commission adopted recreational and commercial salmon fishing seasons this past April for ocean waters along the California coast. According to the PFMC, the ocean abundance index forecast for Sacramento River fall Chinook in 2010 is 245,500 adults, which is expected to meet the spawner escapement goal of 180,000 adults while providing approximately 65,000 fish for limited recreational and commercial fisheries.

The 2010 recreational salmon season for ocean waters off California is as follows:

 Oregon border to Horse Mt. (the Klamath Management Zone) will be open from May 29 through
 "Salmon" continued on 1980 2



DFG Reviews First Half-Season of Recreational Lobster Report Cards by Travis Buck, Marine Biologist

The recreational fishery for California spiny lobster spans roughly five coastal counties in southern California, from Point Conception south to the U.S.-Mexico border. Until recently, relatively little information has been available on the catch and effort in the recreational fishery, yet this information is needed to assess the health of the spiny lobster population.

To fill the recreational information gap, the Fish and Game Commission required recreational lobster fishermen to fill out lobster report cards starting with the 2008/2009 fishing season. The Department of Fish and Game (DFG) Invertebrate Management Project has released

a preliminary review of the data from the lobster report cards for the first half of the 2008/2009 recreational lobster fishing season (October, November and December 2008).

Report cards, like fishing licenses, are issued for a calendar year, so the 2008 lobster report cards only covered the first half of the 2008/2009 season. The 2009 lobster report cards, which cover the second half of the 2008/2009 season and the first half of the 2009/2010 season, were not due back to the DFG until January 31, 2010. Thus the January, February, and March 2009 data (the second half of the 2008/2009 season) will not be analyzed until later in 2010. Some early estimates presented here may change as data from the second half of the 2008/2009 season is incorporated into this ongoing review.

Approximately 27,500 fishermen bought lobster report cards in 2008 (compared to approximately 31,000 cards sold in 2009). A total of about 5,800 report cards for 2008 were returned to the DFG, a return rate of 21 percent. This return rate is statistically large enough to generate estimates on the total catch, total effort (number of

"Lobster" continued on page 8

ELEMENTS OF A DOCUMENT

- Headers, footers, page numbers
- Titles, headings, subtitles
- Body text, lists, hyperlinks
- Images (photos, illustrations, maps, graphs, decoration) and captions
- Tables of data (columns and rows)
- Indices, appendices, tables of contents

ELEMENTS OF AN **ACCESSIBLE** DOCUMENT (1/2)

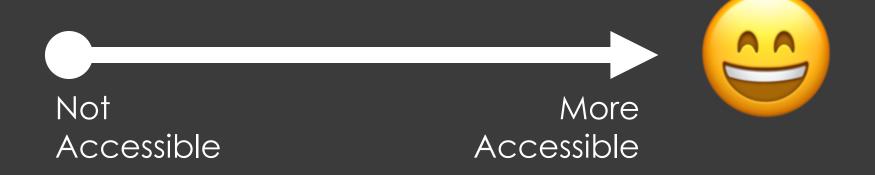
- Text is:
 - Selectable / Searchable
 - Legible, with good contrast
- Tags the "label on the package" needs to be accurate (paragraph, heading, list, image, table...)
- Alt Text non-text content is described with text

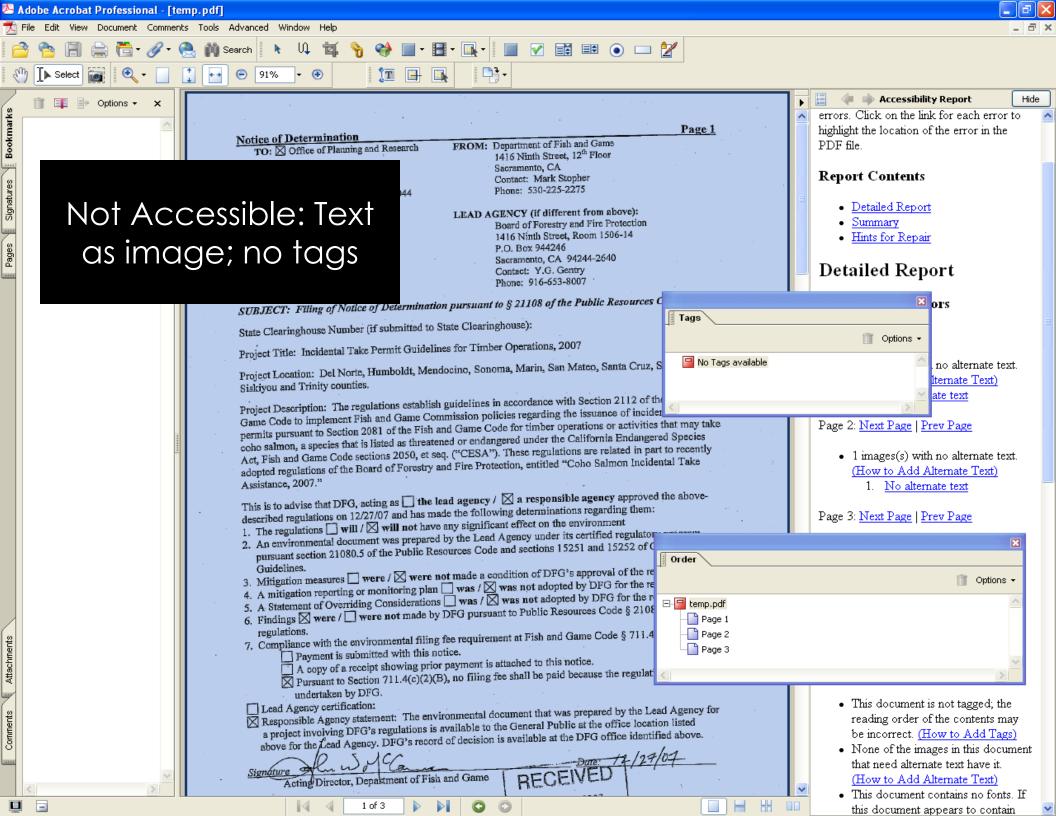


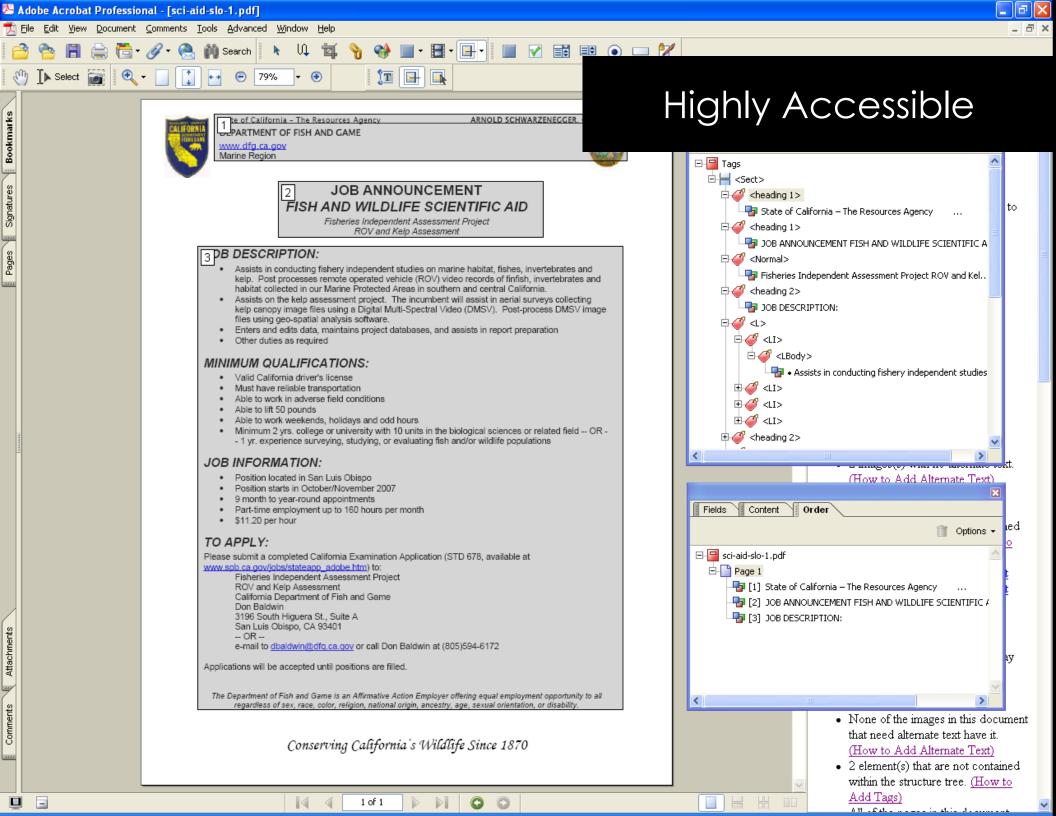
ELEMENTS OF AN **ACCESSIBLE** DOCUMENT (2/2)

- Structure document can be mapped in a logical structure (or outline), based on heading styles, which tags the content with an appropriately nested hierarchy
- Order content is tagged and placed such that it is delivered by assistive technologies (delivery is linear) in the intended, logical order

DEGREE OF ACCESSIBILITY







ACCESSIBLE FROM THE START

- It's MUCH easier to make a SOURCE document accessible than the PDF generated from it.
- Bonus: won't have to repeat work if doc is edited.

COPY THESE FILES TO YOUR DESKTOP

- 1. dfg.ca.gov/image.png
- 2. dfg.ca.gov/copy.txt

HOW TO CREATE ACCESSIBLE WORD DOCUMENTS



GENERAL STYLE RULES

- State Admin Manual requires
 Sans Serif font, 12 pt. min.
- Single space between sentences
- Use Paragraph Spacing settings avoid empty paragraphs; left align body text
- Shift+Enter to create a line break within paragraph
- Reserve underline for <u>hyperlinks</u>

SET UP WORD "STYLES"

TIP: Show formatting symbols (¶)

- MS Office Styles = <tags> </tags>
- Set up primary Styles:
 - "Normal" = basic paragraph
 - Title, Headings, Lists...
- Save to Default or New Template
- Import/Export Styles

WORD: CREATE STRUCTURE

Use **Heading Styles** to designate content sections and subsections, create hierarchy

- Level 1 Heading (document title)
 - Level 2 Heading (chapter?)
 paragraphs, tables, lists, figures...
 - Level 3 Heading (section?)
 paragraphs, tables, lists, figures...

WORD: FORMATTING

- Use **STYLES** for consistent, tagged formatting ("Normal", Heading 1/2/3..., Header, Footer...)
- Use Paragraph Settings to adjust spacing
- Use List Tools as much as possible
- Use Column Tool for side-by-side layout
- Use Tables for tabular data only
- Use Hyperlink to link descriptive text

WORD: IMAGES

- Use rights
- Avoid:
 - Unnecessary images
 - Backgrounds
 - Images of text
- Provide Alt Text for pictures and illustrations
- Mark as decorative when image provides no content value



COLOR & CONTRAST

- Foreground to background color contrast ratio must meet <u>WCAG AA standard</u>.
- Avoid background images.
- Use pattern or symbol with color to indicate meaning.

WORD: TITLE PROPERTY

Properties *

Size Not saved yet

Pages 1

Words 338

Total Editing Time 124 Minutes

Title Example of Accessible Word Docu...

Tags Add a tag

Comments Add comments

Related Dates

Last Modified

Created Today, 11:24 AM

Last Printed

Related People

Author

BA_ Barlow, Angela@Wild...

Add an author

Last Modified By Not saved yet

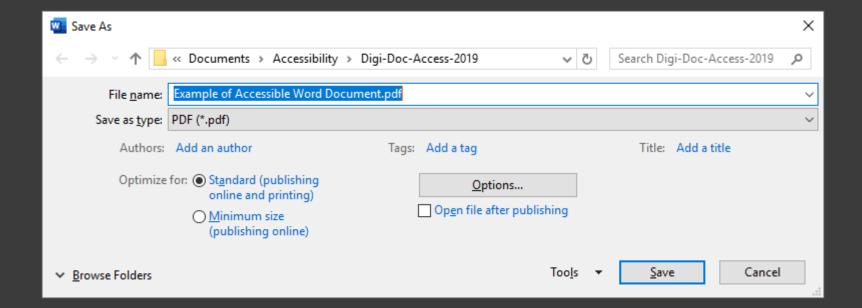
- Always provide
 a **Title** in File
 Properties
 (access via File tab)
- Author is good too ©

WORD: CONVERTING TO PDF

- Save As... (F12)
- DO NOTPrint to...PDF

- Save as type: PDF (*.pdf)
- Options...
 Create bookmarks
 using:

 Headings
 (required for 21+ pages)



CHECKING FOR ACCESSIBILITY

CHECKING FOR ACCESSIBILITY: WORD

- √ "Check Accessibility" tool
 - In Status Bar
 - From Review tab
- ✓ Alt Text makes sense
- ✓ Reading order makes sense
- ✓ File Properties have Title and Author.
- Lengthy docs have hyperlinked Table of Contents

CHECKING FOR ACCESSIBILITY: PDF

Depends on application (Foxit, Acrobat, etc.)

- ✓ Selectable text
- ✓ Properties:
 - ✓ Title and Author
 - ✓ Tagged PDF: Yes
 - ✓ Initial View → Display document title
- Automated checker
- ✓ Lengthy docs have bookmarks or TOC

ACCESSIBILITY IN **POWERPOINT**

Use Layout Templates:
 Styles/tags are built in!

P

- Describe non-text content with Alt Text
- Accessibility Checker, <u>read-order</u>
- File Properties

ACCESSIBILITY = ACCESS TO ALL

- *BONUS* Accessible documents...
- Provide better search results;
- Are easier to interpret across all means of access (devices, browser, OS, etc.); and
- Will be more adaptable to future tech
- ...due to appropriate assignment of **TAGS**

RESOURCES

- <u>iNTRANET Document Library page</u> has extensive job aids and other resources to assist with document accessibility.
- Request document accessibility assistance or assessment by contacting us through the Help Desk Self-Service Portal (select "Make a Request", then "Web Accessibility").

END