CDFW Climate College: Lecture #8

In it for the long haul: CDFW Going Green Sustainability Initiative





Crilly Butler CDFW



Whitney Albright CDFW



Save the Date!

CDFW Climate College Awards Ceremony:
 Tuesday June 25th, 1:00-3:00PM
 Natural Resource Building Auditorium-Sacramento

Celebrate projects completed by your colleagues!

- Watch 7 of 9 lectures & submit a project
 - Receive certification from DFW/OTD and a certificate of completion from the Director



Save the Date!

CDFW Climate College Awards Ceremony: Tuesday June 25th, 1:00-3:00PM

Projects Due May 31st!

The evolution of climate change approaches in Natural Community Conservation Plans in California

Develop Climate Change Considerations section(s) for CDFW Salmon Vision Document

Climate Change and the Suisun Marsh: How will Fish and Wildlife Species be Impacted?

Climate Change Impacts to California Rangelands Webpage

Climate Change Impacts on the Amargosa River Vole

Integrating potential climate change impacts into management plans for CDFW properties in the San Joaquin Valley area

Climate Education for All Ages

Upland Water-Wise Food Garden



Building a Climate Community: Regional Staff Highlights

- Marine Region Climate Workgroup
- Doug Neilson/Climate Scientist on staff!
- Elk Horn Slough-Climate Research &
 Climate Adaptation Projects

Adaptation Action: Elkhorn Slough

Climate Research & Monitoring

- o Water Quality
- o Habitat Change
- o Biological Indicators

Adaptation Projects

- o Oyster restoration
- Wetland-upland ecotone as indicator
- o Tidal restoration



CDFW Climate College: Lecture #9

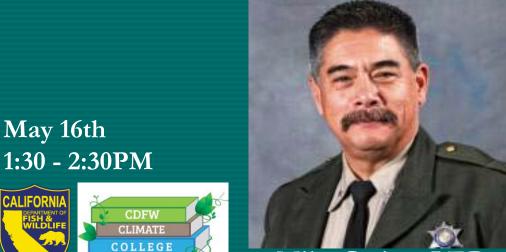
Walk the Talk: CDFW Testimonials



Kevin Hunting



Gordon Leppig, R1



Mike Carion, LED



Debbie Aseltine-Neilson, MR





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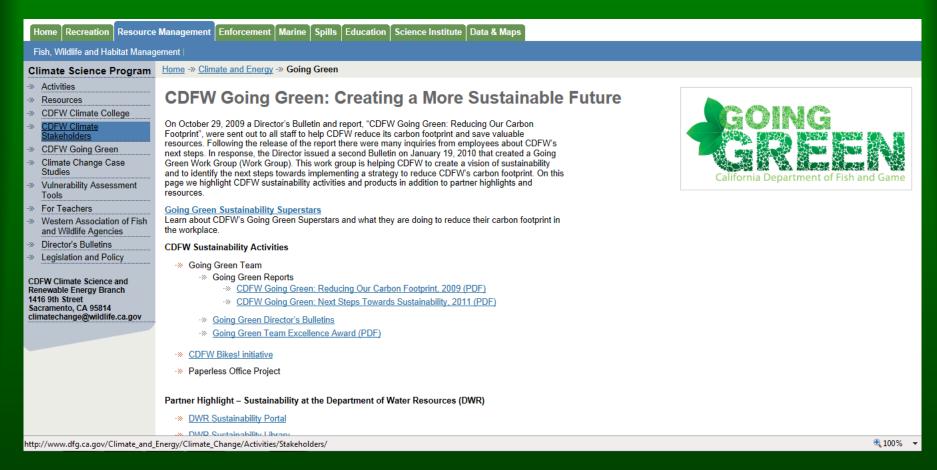
Whitney Albright Climate Change Associate California Department of Fish and Wildlife Climate Science and Renewable Energy Branch





What is Going Green?

Staff-driven sustainability initiative at the Department



Outline

- Development of Going Green initiative: Reports, Bulletins, and the Going Green Team
- DFW Bikes! committee
- Highlight of Department sustainability activities
- Highlight of staff sustainability activities

DFW: Reducing our Carbon Footprint



FISH AND GAME

DFG Going Green: Reducing Our Carbon Footprint

Compiled in this document is a list of ideas that the Department of Fish and Game (Department) could take to create a more climate change friendly way of doing business. Many of the examples mentioned would not only help decrease the Department's contribution to the climate change challenge but also save the Department valuable resources and funds. Specifically, these activities can help minimize the Department's carbon budget and greenhouse gas (GHG) emissions. Examples include going to electronic signatures to cut down on paper, resolving mileage requirements for vehicle use, web-based meetings and conferences, and exploring financial incentives provided by companies such as PG&E to help us "green" Department facilities. Many thanks to all the Department employees who contributed thoughts and suggestions¹ and helped get this document off the ground. Special thanks to Linda Miller for compiling comments and preparing the document for review.

¹Brian Acord, Chuck Armor, Tina Bartlett, Roxanne Bittman, Brenda Blinn, Jennifer Carlson, Jeanne Chinn, Janet Cobb, John Elkhoff, Richard Fitzgerald, Gina Ford, Gayle Garman, Holly Gellerman, Diana Gillingham, Diana Hickson, Cristen Laugner, Melissa LaPorte, Gordon Leppig, Tracy Love, Tom Lupo, Leslie MacNair, Glenda Marsh, Ray McDowell, Shaina Meiners, Linda Miller, Dave Moore, Isaac Oshima, Mouica Parisi, Katie Perry, Heather Pert, Cynthia Roye, Mark Smelser, Mike Snyder, Dale Steele, Timothy Stevens, Valerie Vanway, Cathie Vouchilas, Bruce Webb, Julie Yamamoto, and Marci Yaremoko.

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DFW Going Green Team



Going Green Team: Sustainability Report



DFG Going Green: Next Steps Toward Sustainability
September 20, 2011

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Director's Bulletin: Guidelines for Reducing Carbon Footprint

- Paper Reduction
- ▶ Transportation
- Energy Conservation & Efficiency
- Reduction in Water Use
- ▶ Green Meetings
- Purchasing
- Recycling

Going Green Team Wins DFG Employee Excellence Award!



DFW Bikes!

- ► Bikes committee
 - Promote happy and healthy work environment
 - Incentivize commuting to work
 - Support biking community at DFW
- ► DFW Bikes! online forum
- ► DFW Bikes! website



DFW Bikes!



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Fish, Wildlife and Habitat Management

Climate Science Program

- Activities
- CDFW Climate College
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Resources

- Climate Change Case Studies
- Vulnerability Assessment Tools
- For Teachers
- Western Association of Fish and Wildlife Agencies
- Director's Bulletins
- Legislation and Policy

CDFW Climate Science and Renewable Energy Branch 1416 9th Street Sacramento, CA 95814 climatechange@wildlife@a.gov

ww.ca.go

Home ->> Climate and Energy ->> Going Green ->> CDFW Bikes

CDFW Bikes!

At the initiative of CDFW staff the Director has formed a new committee called CDFW Bikes! that is focused on creating incentives to encourage employees to bike more frequently in order to reduce the Department's carbon footprint and increase employee morale around an activity that promotes a healthy lifestyle. Scroll down to view informational links related to bike safety, commuter tips, bike maps, and more. If you have suggestions for additional resources that should be on this page please contact us at climatechange@dfg.ca.gov.



May is Bike Month

Check out the 'Small Employers' tab on the right. CDFW is listed third place for logging the most bike hours in 2011!

Biking/Commuting Resources

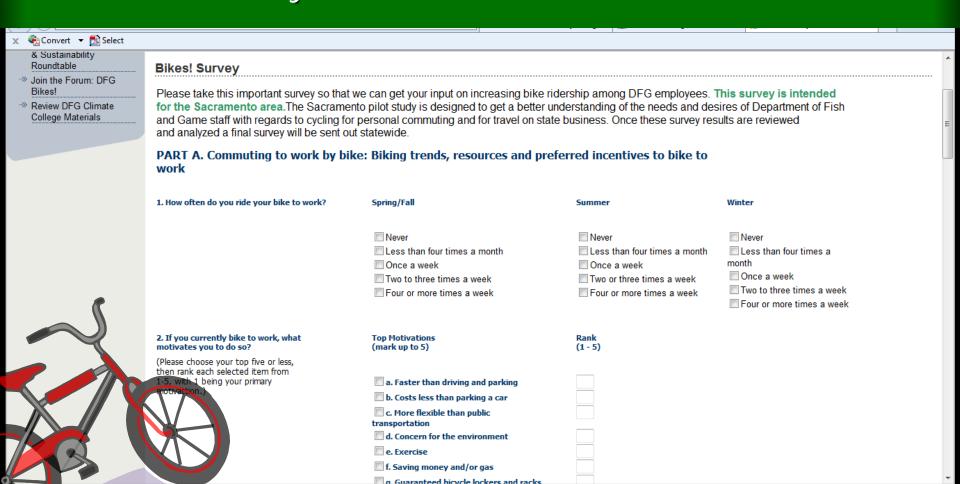
- Biking Laws and regulations
 - Bike Link: California Bicycle Laws and Safety
 - ->> California DMV: California Driver's Handbook: Sharing the Road with other Vehicles
- Commuter tips
 - ->> Bicycle Hub: Tips for Commuters (PDF)
 - ->> Caltrans: Bicycle Commuting and Safety
 - California DMV: Bicycle Rules and Safety

₱ 100% ▼



DFW Bikes!

- ▶ Where are they now?
 - Bike survey



Department Activities: Implementing Executive Orders

► EO B-18-12; Green building practices, energy conservation, water use (BMB & ITB)

► EO B-16-2012; Zero emission vehicles (EB)

Department Activities: Tracking Emissions Reduction

- Collecting information on...
 - vehicle fuel usage
 - bulk fuel purchases
 - electricity consumption
 - utility usage (i.e. metered kilowatt hours)
 - all other greenhouse gases statewide
- Established 2008 as a baseline
- Reporting a reduced energy use intensity (kBtu/sq.ft) of 7.3% in 2010

Department Activities: Paper reduction and energy savings

PC Imaging, screen savers, etc.

Reducing paper consumption by converting paper forms to electronic format

Staff Activities: Sampling of Sustainability Efforts

- Region 1: Climate committee
- Region 2: Recycling program
- ► Region 3: Sustainability mindset

Staff Activities: Sampling of Sustainability Efforts

- Region 4: Optimizing energy use
- Region 5: Reducing paper and toner use
- Region 6: Bishop and Ontario office highlights
- Business Management Branch: Kitchen composting experiment

Staff Activities: Sustainability Superstars!

Home | Recreation

Resource Management | Enforcement | Marine | Spills | Education | Science Institute | Data & Maps

Fish, Wildlife and Habitat Management

Climate Science Program

- Activities
- Resources
- CDFW Climate College
- **CDFW Climate** Stakeholders
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CDFW Climate Science and Renewable Energy Branch 1416 9th Street Sacramento, CA 95814 climatechange@wildlife.ca.gov

Home ->> Climate and Energy ->> Going Green ->> Sustainability Superstars

CDFW's Going Green team, initially comprised of a handful of members, has grown to include over 150 staff at different times and in varying capacities since it's inception. As a result of their efforts, the Going Green core team was recognized by CDFW with an Employee Excellence Award. The Going Green team was one of only two recipients of this award in 2012. To highlight some of the activities that have made the Going Green initiative what it is today, we have compiled the list of stories below that demonstrate some of the actions being taken by CDFW Going Green team members and other staff to increase sustainable operations at CDFW.

CDFW Going Green: Sustainability Superstars!

If you would like to recognize an individual or group of CDFW staff that are making a difference as sustainability superstars, please contact us at climatechange@dfg.ca.gov.

Crilly Butler, IT Branch: Paper to Electronic Form Migration Project



CDFW believes that converting internal paper-based forms to an automated, electronic document format utilizing electronic signatures will save time and money, improve speed and efficiency, and reduce CDFW's overall carbon footprint. Crilly Butler has taken a lead role in migrating older-generation fill-andprint forms to an all-electronic form-processing technology. This will eventually enable forms to be routed around the department through their entire lifecycle using digital signatures and an automated workflow engine following the business rules specific to each form. One by one, forms are being converted to use this new technology, and ultimately most of the department's forms processing will be digital.

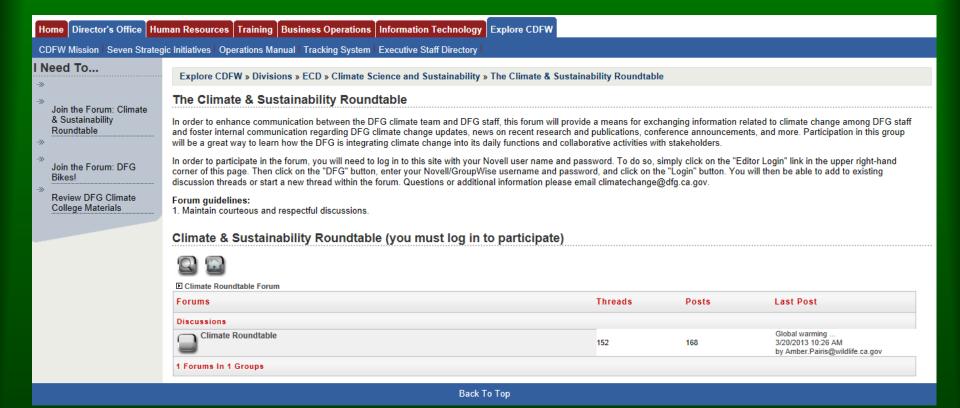
Melissa LaPorte, Business Management Branch (BMB): Kitchen composting experiment

Over the past few years, Melissa has worked tirelessly to promote sustainability at CDFW and has been a core member of CDFW's Going Green team since its



What's Next?

► It's up to you!





From Paper Forms to eForms

A Collaborative Model for Moving Forward

CDFWClimate College April 11, 2013

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Why Migrate from Paper to Digital?

- Savings in time
- Savings in dollars
- Improvement in speed
- Improvement in efficiency
- Improvement in traceability
- Improvement in accountability
- Improvement in security

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Initial Process

- Find a "fill-and-print" form on the Intranet
- Open the form and complete it
- Print it out
- Sign with a "wet signature"
- Make a copy for YOUR records
- File the copy
- Walk the signed form over to your supervisor

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Initial Process (cont.)

- Supervisor signs the form
- Supervisor makes a copy for his/her records
- Supervisor files his/her copy
- Supervisor mails the form for final approval
- Form arrives at destination
- Form receives final signature/approval
- Form is copied
- Form is filed for permanent record

And that's if everything goes perfectly...

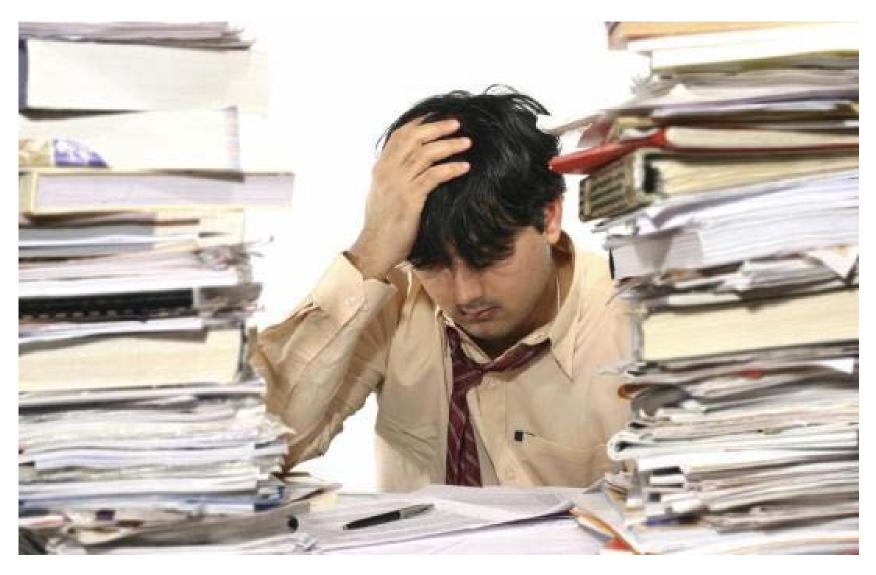


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Ramifications of Initial Process

- Time consuming can take days to process a form
- Incurs expenses of printing (paper, toner cartridges, printer maintenance, etc.)
- Incurs expenses of transport (envelopes, postage, mail room staff, courier fees)
- Incurs expenses for storage and archiving ALL the copies throughout the organization
- Difficult to track, and easily lost or misplaced
- Little accountability without cumbersome supporting systems

What's the Alternative?



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Process Improvement (Goals)

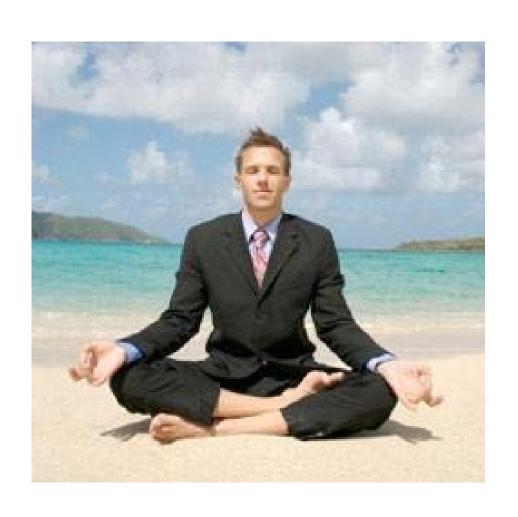
- Go paperless! Convert paper forms to eForms
- Move from wet signatures to digital signatures
- Make use of existing infrastructure and technologies as much as possible
- Transmit forms electronically (email attachment)
- Secure forms (records) automatically
- Save forms securely in designated network shares with access controls
- Save time, money, other resources, and headaches, while significantly improving the overall business process

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New "Paperless" Process

- Find the "fill and send" form on the Intranet
- Open the form, complete it and digitally sign it
- Save an electronic copy locally for your records
- Send it via email attachment to the approver
- Approver digitally signs, saves copy locally and forwards it on to its final destination
- Form gets final digital signature (if necessary) and is saved to a secure network share

Okay, Maybe Not Quite...





Project Requirements

- Obtain high-level buy-in and support (key!)
- Look for a solution that can be implemented using existing infrastructure and technologies (no added expense)
- Start small (eat the elephant one bite at a time)
- Carefully select initial form candidates
- Vet with the legal department (and persuade as necessary)
- Begin the process of "turning the battleship" (sea change in "corporate culture")

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Candidate Form Requirements

- PDF form that can be completed electronically
- Form must be able to complete the entire internal business process
- Form must be able to be signed electronically
- Form signatures must be sufficiently trusted
- Form needs to be able to be routed electronically in some manner to all signatories or parties (email)
- Completed form must be stored in a secure digital repository
- Electronic business process needs to surpass the current manual process with regard to speed, ease of use, accuracy, security, resource costs and trust

Legal Support – CA Government Code Section 16.5

16.5. (a) In any written communication with a public entity, as defined in Section 811.2, in which a signature is required or used, any party to the communication may affix a signature by use of a digital signature that complies with the requirements of this section. The use of a digital signature shall have the same force and effect as the use of a manual signature...

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Enabling Technologies

- Form design tool (e.g. Adobe Acrobat Professional/LiveCycle Form Designer ES)
- Form response tool (e.g. appropriate version of Adobe Reader)
- Secure digital certificate (either internal certificate for internal use or third-party trusted certificate for universal use)
- Secure repository (e.g. network shared folder with appropriate access controls and security)
- Automated form distribution methodology (email)

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Assumptions

- Person(s) will be designated to create the electronic forms
- A secure digital certificate can be obtained, at no cost, that is acceptable for internal departmental use
- Form initiation and response tool(s) are available within the current desktop image of the department (e.g. Adobe Acrobat Professional and Reader)
- Certificate will be installed by individual employees in a secure location (file or registry)
- Network shares at destination will be created and configured
- Appropriate instructions will be created and training made available to participants

Form Sampling Process

Form Number	Form Name	Internal Only	Fill-And-Print	Signature Required	Approval(s) Required
STD-4	Contract/Contractor Evalu	N	Y	Y	N
FG-158	Internal Equipment Trans	Y	Y	Υ	Yes, but not a legal rqmt.
FG-BCMB-562	Home Based Equipment	Y	Y	Y	Yes, but not a legal rqmt.
FG-128	Supplement to Survey Re	Y	Y	Y	Yes, but not a legal rqmt.
FG-BCMB-195	Request to Change Multi-	Y	Y	Y	Yes, but not a legal rqmt.
FG-64	Registration of Vehicles	Y	Y	Y	No
FG-BMB-558	Facilities Action Request	Y	Y	Υ	Yes, but not a legal rqmt.
FG-BMB-584	Request for Office Moving	Y	Y	Y	Yes, but not a legal rqmt.
FG-BMB-579	DGS Resources Building	Y	Y	Υ	Yes, but not a legal rqmt.
FG-139	Contract Close Out	Υ	Y	Υ	No

Project Path



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Project Path

- Select final form candidates
- Create all-electronic versions of forms
- Experiment with creating digital signatures
- Test forms
- Create user documentation
- Publish forms and documentation
- Obtain executive mandate (in memo form)
- Promote training and help resources

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Build It and They Will Come!

- Requests from throughout department for converting additional forms
- Solicit and distribute manager mandates
- Update/refine existing forms
- Create/migrate new forms
- Track success
- Pursue incremental progress



Resources

- California Government Code 16.5
 http://www.sos.ca.gov/digsig/code-section-16-5.htm
- California Code of Regulations, Title 2, Sections 22000-22005 http://www.sos.ca.gov/digsig/digital-signature-regulations.htm
- Digital Signatures in Acrobat
 http://learn.adobe.com/wiki/download/attachments/52658
 564/digital_signatures_in_acrobat_9x.pdf?version=1

Discussion



CDFW Climate College: Lecture #9

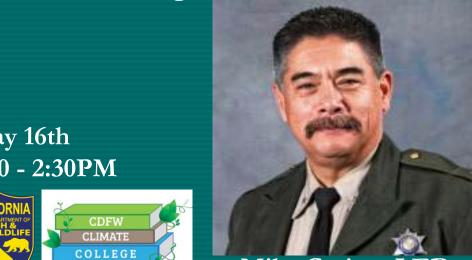
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