

U.S. Environmental Protection Agency Board of Scientific Counselors

Executive Committee

Virtual Meeting Summary

May 4–5, 2022

Dates and Times: May 4, 2022, 12:00 p.m. to 5:00 p.m.; May 5, 2022, 12:00 p.m. to 5:00 p.m. Eastern Time

Location: Virtual

Executive Summary

On May 4–5, 2022, the Environmental Protection Agency (EPA)'s Board of Scientific Counselors (BOSC) Executive Committee (further referred to as the Committee or EC) convened in virtual meetings. The goals of the two-day meeting were to discuss the Office of Research and Development (ORD)'s six Strategic Research Action Plans (StRAPs) and solicit public comment on the six draft StRAPs. The meeting format allowed for presentations, open dialogue, Committee deliberations, questions, and EPA responses to questions.

Day 1 consisted of opening remarks and introductions, charge question overviews, overviews of relevant Executive Orders (EOs), cross-cutting research priorities, and StRAP planning and engagement. After a Q&A on engagement and EOs, draft strategic action plans were discussed. Day 2 consisted of a Q&A session, public comments, a review of the charge questions, and report development. The participants were then split into StRAP workgroups to discuss the charge questions in breakout sessions. Following the breakout sessions, the participants reconvened for plenary discussions.

Mr. Tom Tracy, Designated Federal Officer, Office of Science, Advisor, Policy, and Engagement (OSAPE), welcomed the Committee and introduced Dr. Chris Frey, Deputy Assistant Administrator for Science, ORD. Dr. Frey subsequently presented the ORD StRAPs. The newly streamlined structure consisted of a new EC, a climate-change subcommittee, and a Social and Community Science subcommittee. The focus was on BOSC reviewing the ORD StRAPs for fiscal years 2023–2026 and providing a strategic overview of priorities over the next four years of research. The collaborative process for these StRAPs was the primary theme in this meeting. ORD was interested in receiving recommendations for setting up relevant plans.

Wednesday, May 4, 2022

Overview of Executive Orders

Dr. Kacee Deener, Acting Deputy Director, OSAPE, provided an overview of the relevant EOs and Presidential Memorandums informing ORD research planning and implementation. EO 13985 addressed systemic barriers in accessing benefits and opportunities, while EO 14008 centered on environmental and economic justice, and EO 14017 focused on America's supply chains. EO 13990 focused on protecting public health, the environment, and tackling the climate

crisis. Dr. Deener discussed a memorandum on restoring trust in government through scientific integrity and evidence-based policymaking. The next memorandum addressed tribal consultations and strengthening nation-to-nation relationships, reaffirming EO 13175. EO 14035 focused on diversity, equity, inclusion, and accessibility (DEIA) in the deferral workforce. Finally, EO 14057 discussed catalyzing clean energy industries and jobs through federal sustainability.

Overview of Cross-Cutting Research Priorities

Dr. Tim Watkins, Director, Center for Environmental Measurement and Modeling (CEMM), discussed cross-cutting research priorities including ORD coordinating and integrating efforts as well as providing a research portfolio aligned with the goal of assisting EPA's program and regional offices along with individual states and tribes. The six priority areas for ORD are environmental justice (EJ), cumulative impacts, climate change, community resiliency, children's environmental health, and contaminants of immediate and emerging concern. The EJ focus consists of supporting actions at the agency, state, tribal, local, and community levels to address environmental and health inequalities. The climate-change focus involves research to understand and mitigate the impacts of climate change. The cumulative-impact focus involves integrating efforts to improve understanding of the cumulative impacts on health and the environment. The community resilience focus involves researching, supporting, and empowering communities to make science-based decisions in adverse situations. The children's environmental health focus involves conducting research to inform public health decisions, advancing the understanding of early-life susceptibility, sustaining healthy environments, and protecting individuals at all life stages. The focus on contaminants of immediate and emerging concern includes working with EPA partners to identify the highest priority contaminants, including those of immediate concern, such as per- and polyfluoroalkyl substances (PFAS) and lead.

Overview of StRAP Planning and Engagement

Dr. Watkins provided an overview of StRAP planning and engagement. The six national research programs are Air, Climate, and Energy (ACE), Homeland Security (HS), Safe and Sustainable Water Resources (SSWR), Chemical Safety for Sustainability (CSS), Health and Environmental Risk Assessment (HERA), and Sustainable and Healthy Communities (SHC). The ORD research cycle consists of problem identification, strategic planning, research implementation, BOSC external review, product development, external peer review, product delivery, public access to data, and program evaluation. Dr. Watkins defined the StRAP topics, research areas, outputs, products, and partners. Research Area Coordination Teams (RACTs) focus on a specific research area within a National Research Program (NRP). RACTs assist NRPs in engaging partners, identifying priority research needs, and reviewing and providing input on proposed products. RACTs also collect and incorporate partner science priorities and needs with EPA regions, states, and tribal nations. Dr. Watkins concluded that the coordination of these StRAPs will occur through final webinars and formal consultations.

Dr. Michelle Latham, NPD Outreach Lead, discussed research planning engagement, which includes listening sessions, formal consultations, and planning workshops. External partner

listening sessions included discussions on wildfires in January and February 2021, climate change in July 2021, and the cumulative impacts in September 2021. The research planning workshops were organized by ORD and engaged perspective panels from agency partners, communities, NGOs, and expert guest speakers to inform the development of FY23-26. The EJ workshop focused on the intersection of air quality, climate, and other environmental issues, and addressed equity. The cumulative-impact workshop focused on poverty, inequality, the built, social and natural environment stressors, and the responses to environmental pollutants. The community capacity workshop focused on understanding community needs and capabilities and tailoring research and development accordingly. The climate-change workshop focused on gathering information for ORD's prioritization of research to address climate change. The eight formal tribal consultations focused on the proposed research products aligned with tribal research and science needs. The comment period was from March 1st to May 21st.

Q&A on Engagement and EOs

Dr. Paul Gilman, EC Chair and Dr. Lucinda Johnson, EC Vice Chair, led a Q&A session with BOSC members. Discussion topics included the RACT cycle engagement, agency and staff involvement, and the mechanisms used to engage other federal partners. Other discussion topics included the involvement of chemical groups versus individual chemicals, program office participation, the Executive budget, and ORD's management of potential changes to this plan.

Draft Strategic Research Action Plans: Air Climate and Energy

Dr. Bryan Hubbell, National Program Director, ACE Research Program, explained the vision of the Air Climate and Energy program, engagement goals, and the need for a holistic systems approach. He discussed the research areas in the context of the Source-to-Impacts Continuum.

Topic 1 includes research areas 1–5. Research area 1 focuses on the sources and sinks of air pollution and climate forcers. Research area 2 addresses air quality concentrations and exposure characterization. Research area 3 includes the development, evaluation, and application of air quality models informing air quality concentrations and exposure characterization models. Research area 4 focuses on the health impacts of air pollution and climate change, with an emphasis on overburdened communities. Research area 5 consists of the ecosystem impacts of air pollution, climate change, and the impacts on ecosystem services.

Topic 2 includes research areas 6–9. Research area 6 will assess the scientific support for climate change and air quality policy solutions. Research area 7 will investigate how empowering communities and individuals to improve public and ecosystem health may reduce exposure and health impacts. Research area 8 will address the fire, flood, extreme event risk response, and community resilience. Research area 9 will examine strategies to transition to a sustainable future, nature-based solutions, reduction of emissions/increased sustainability, and building regional capacity.

Draft Strategic Research Action Plans: Chemical Safety for Sustainability

Dr. Annette Guiseppi-Elie, Associate Director for Science, Center for Computational Toxicology and Exposure (CCTE), introduced the vision of the CSS research program, emphasizing the environmental and health challenges posed by insufficient information on chemicals. CSS has

engaged with the EPA, state, tribal organizations, and other federal agencies. Further, they have solicited public input with a two-day conference. Dr. Guiseppi-Elie discussed the three focal topics for the CSS research program: Chemical evaluation, Complex Systems Science, and Knowledge delivery and Solutions-Driven Translation to Support Chemical Safety Decision-Making. Six of the eight areas of related research focused on PFAS.

- Topic 1 includes research areas 1–3. Research area 1 involves high throughput toxicology, addressing the previous limitations of animal testing. Research area 2 includes rapid exposure and dosimetry. Research area 3 consists of emerging materials and technologies to assess emerging exposures.
- Topic 2 includes research areas 4–6. Research area 4 focuses on adverse outcome pathways, assessing the effects of real exposure to mixtures, and climate change. Research area 5 investigates virtual and complex tissue modeling. Research area 6 involves ecotoxicological assessment and modeling.
- Topic 3 includes research areas 7–8. Research area 7 will focus on chemical characterization and informatics. Research area 8 is about integration, translation, and knowledge delivery, to better inform the needs and decision-making of research partners.

Draft Strategic Research Action Plans: Health and Environmental Risk Assessment

Dr. Samantha Jones, Associate Director for Health, National Center for Environmental Assessment, introduced the vision of the HERA research program, which aims to innovate and advance the science of risk assessment and focuses on science assessments and translation. HERA intends to enhance research to better assess health disparities and ensure previous assessments inform decisions. Research area 1 involves the development of science assessment methods to improve assessment products. Research area 2 focuses on science assessment translation to serve as a conduit between assessment application and research. Research area 3 includes emerging and innovative assessment methodologies, such as predictive toxicology, rapid evaluation, systematic review, and cumulative risk approaches. Research area 4 involves essential assessment and infrastructure tools.

Draft Strategic Research Action Plans: Homeland Security

Dr. Sang Don Lee, Environmental Scientist, Homeland Security Research Program, summarized the program vision and engagement. HS focuses on three areas: contaminant characterization and risk assessment, environmental cleanup and infrastructure remediation, and community engagement and systems-based tools supporting resilience equity.

Research area 2 involves contaminant characterization, risk assessment, development of methods, and strategies for sampling, processing, analyzing, and cleanup.

Topic 2 includes research areas 3–6. Research area 3 investigates wide-area decontamination to help remediate communities impacted by an environmental contamination incident or natural disaster. Research area 4 assesses the incident-response support for water systems and the development of decontamination methods for drinking and plumbing use. Research area 5 addresses oil spill response support while working closely with the US Coast Guard and the development of effective management strategies for oil spills, mitigation, and assessment.

Research area 6 involves waste management and the development of management tools, processes, and plans to respond to contamination and natural disaster events.

Topic 3 includes research areas 7–8. Research area 7 involves systems-based decision-making and the development of tools to support response and recovery decisions (centralized database). Research area 8 addresses communities, resilience, remediation, and investigation of the relationship between social and environmental variables impacting resilience and vulnerability.

Draft Strategic Research Action Plans: Sustainable and Healthy Communities

Dr. Tim Watkins summarized the vision of the SHC program. The program focuses on three topics: advancing remediation and restoration of contaminated sites; materials management and beneficial reuse of waste; and an integrated systems approach to building healthy and resilient communities.

Topic 1 includes research areas 1–5. Research area 1 involves technical support, assisting EPA partners, states, tribes, and land management agencies with expert consultation on areas such as reuse, remediation, and assessment. Research area 2 includes site characterization and remediation and provides methods, models, tools, and technologies to support remediation, cleanup, and site characterization. Research area 3 involves solvent vapor intrusion, developing effective methods for controlling intrusion. Research area 4 addresses leaking underground storage tanks, degradation assessment with SHC, and tool development. Research area 5 focuses on chemicals of immediate and emerging concern, especially lead and PFAS.

Topic 2 includes research areas 6–8. Research area 6 addresses landfill management and the development of tools, processes, and methods to improve waste management. Research area 7 involves material flow and Life Cycle Assessment (LCA) and supports minimization of waste generation, reducing the environmental impact, and increasing recycling. Research area 8 addresses waste recovery, beneficial use of materials, and engineering approaches to innovations for waste recovery, reuse, and safety.

Topic 3 covers research areas 9–11. Research area 9 investigates the benefits of remediation, restoration, and revitalization, focusing on EJ concerns, and connecting the environment, human health, and wellbeing. Research area 10 assesses the cumulative impacts and community resilience, aiming to improve equity, benefits, and resilience, with an EJ focus. Research area 11 measures the outcomes through reports on the environment.

Draft Strategic Research Action Plans: Safe and Sustainable Water Resources

Dr. Suzanne van Drunick, National Program Director, Safe and Sustainable Water Resources Research Program, provided an overview of SSWR and its vision. The SSWR program is focused on three topics: Watersheds, Nutrients and Harmful Algal Blooms (HABs), and Water Treatment and Infrastructure. The current emphasis is on climate, resilience, cumulative risk, children's health and equity, and the blue carbon solutions-driver research project.

Topic 1 includes research areas 1–3. Research area 1 focuses on advancing research, supporting aquatic resource monitoring, assessment, characterizing responses to cumulative impacts of multiple stressors, estimating economic benefits of water quality improvements, and protecting and restoring aquatic resources. Research area 2 focuses on ecosystem and community resilience,

improving management of climate-change-related water resource challenges, advancing EJ and equity, and developing tools to build resilience. Research area 3 focuses on advanced ambient water quality and protecting human and aquatic health from contaminants in ambient waters. This research area focuses on providing science information for partners to develop ambient water quality recommendations and methods. It also aims to protect human health and aquatic life from chemical and non-chemical contaminants in ambient waters.

Topic 2 includes research areas 4–5. Research area 4 focuses on the assessment and management of HABs, and supporting EPA, states, and tribes with water quality standards for algal toxins. Research area 5 focuses on nutrients in a changing climate, managing excess nutrient runoff, understanding legacy nutrient sources, and connecting nutrient reduction practices to water quality improvements.

Topic 3 includes research areas 6–10. Research area 6 focuses on alternative water sources for climate adaptation, water reuse exposure risks, identifying alternative water source facilitation, and developing information to help communities make decisions on alternative water use. Research area 7 focuses on drinking water, distribution systems, the Lead and Copper Rule, measurement, characterization, removal of pathogens and chemicals, emerging contaminants, and improving infrastructure resilience and sustainability. Emphasis is on providing actionable and affordable solutions for low-income communities. Research area 8 focuses on PFAS, developing analytical methods, drinking water and wastewater treatment approaches, residual stream treatment and management, and remediation of PFAS sources for protecting water resources. Research area 9 focuses on wastewater, developing effects-based methods for detecting chemical contaminants, assessing antimicrobial resistance, monitoring municipal wastewater for SARS-CoV2 and other contaminants, evaluating treatment approaches for wastewater and biosolids, and assessing wastewater and biosolids for contaminants of emerging concern. Research area 10 focuses on stormwater (including green and gray infrastructure) and leveraging ecosystem services from greenspace and associated green infrastructure.

Topics 1–3 include research area 11. Research area 11 focuses on technical support for communities and applying the research results, models, tools, and technical expertise to support program office, regional, state, and tribal needs for site-specific environmental challenges. The research area includes outreach and training activities for partners and communities.

Concluding Comments

Dr. Rodan, Associate Director for Science, Office of Research and Development, Dr. Gilman, and Dr. Johnson, led the concluding comments portion of the meeting. Dr. Rodan clarified the need for efficient BOSC focus on specific areas. ORD assured BOSC that anticipatory research, climate, and EJ are still under consideration. Dr. Rodan thanked ORD staff for their presentations and BOSC members for their recommendations.

Dr. Gilman encouraged members to read the documents, focus on the objectives, and evaluate the plan clarity. Further discussions clarified that the second charge question focuses on whether there are emerging issues and public health/environment concerns that research organizations should consider.

Adjourn Meeting

The meeting adjourned at 5:30 p.m., Eastern Time.

Thursday, May 5, 2022

Convene Meeting

Mr. Tom Tracy welcomed the participants to Day 2 of the meeting.

Public Comment

One public comment was received; the comment was an editorial on the HS StRAPs. No one requested to speak.

Review Charge Questions and Report Development

Dr. Paul Gilman reviewed the charge questions. The first charge question was reviewing if the strategic Plan document clearly provided the research objectives. The second charge question was states what environmental and public health issues that rise to the level of consideration in these research plans that are not previously touched upon by the author.

Discussion topics included horizon scanning, how will programs be evaluated, looking into futures reports, tracking research through the rapid electronic system, obtaining the status of resources, the congressional budget lines, the presidential budget, cumulative risk/impacts of pesticide toxicology, evidence integration, the Health & Environmental Research Online program, how the last set of reports were incorporated into the strategic planning process, recommendations to examine PFAS categories in the context of exposure, and the toxicity testing of harmful algal blooms.

Breakout Logistics and Next Steps

Dr. Paul Gilman provided an overview of the breakout group logistics. The group was then split into breakout rooms for each charge question.

BOSC Discussion/Concluding Comments

Dr. Paul Gilman led the concluding comments, accepted questions, and then asked for recounts of the breakout room sessions. Mr. Tom Tracy discussed the deadlines and next steps necessary for the working groups to complete their products by the end of May 2022. Dr. Gilman summarized the day's sessions and encouraged members to discuss the breakout sessions in the same order.

Dr. Barrett Ristroph, Principal Ristroph Law, Planning, and Research, summarized the progress of SHC. His group noted a strong EJ component and appreciated the focus on tribal collaboration. He noted that to address cross-cutting issues, they encouraged EPA to implement a more systemic process for determining concerns and prioritization. They encouraged rearranging the appendices and restoring faith in science. They foresaw chemicals and non-chemicals not yet of concern becoming a concern. They also discussed making the supply chain more resilient in the face of the Russia/Ukraine conflict.

Mr. Bart Croes, Chief of Research (retired) California Air Resources Board, summarized the progress of ACE. The group had several suggestions for questions 1 and 2 and resolved to flesh out some of their suggestions, then reorganize and consolidate them. They have a meeting scheduled on the 25th to determine whether to elevate a specific recommendation. Question 1 suggestions are still being fleshed out. This group had three questions for the EPA: How many resources are devoted to this area? What is anticipated for the grant program? Is the finalized April BOSC review of this research area already incorporated? In relation to question 2, they encouraged EPA's involvement in negative emission technologies.

Dr. Justin Teegarden, Director and Chief Exposure Scientist Pacific Northwest National Laboratory, presented the update for CSS. The group noted improvements in the current strategic plan compared to the previous plan but expressed concerns regarding the coordination of stakeholders, partners, CSS, and other programs like HERA to ensure the product impact is achieved. The group requested non-metric details for defining success, to avoid a reporting focus. They wondered about better opportunities to articulate how the RACT engagement cycle works, ensuring it feeds back into the research, increasing the relevance and impact for partners. They encouraged consistency in describing partners and specific engagement with the broader regulatory community outside the EPA. They discussed how CSS could better articulate elements of susceptibility to environmental disparities and how those elements may influence the development and integration of research tools. The group requested that the StRAPs include horizon scanning details, the definition of success, and the scope. The group wondered how this process will be accomplished effectively and prioritized.

Dr. Derek Shendell, Associate Professor of Environmental Health Sciences, Rutgers University School of Public Health, summarized the progress of the HERA workgroup. The group found the question 2 template confusing but will provide suggestions. They appreciated the first charge question's focus on human and ecological health and encouraged more attention on cross-NRP work beyond previous research. They also encouraged more relationships with NIH beyond NTP and recommended the consideration of criteria pollutants, chemicals attached to the particulate matter (PM), New Approach Methods (NAMS), and the combination of PM and aerosolized viruses, etc. Dr. Thurston, Director of the Program in Exposure Assessment and Health Effects New York University School of Medicine, and Dr. Shendell acknowledged that they had discussed EJ, climate change, and cumulative assessments. Dr. Thurston questioned the plausibility of their ideas and requested a meeting with the EPA to discuss the strengths of the ideas and improvement areas. He would prefer to focus on what can be done rather than offering recommendations. Dr. Justin Teegarden communicated the need for a prioritized list of things to do.

Dr. Monica Schoch-Spana, Senior Scholar with the Johns Hopkins Center for Health Security and a Senior Scientist in the Department of Environmental Health and Engineering at the Johns Hopkins Bloomberg School of Public Health, summarized the progress of the HS workgroup. She noted that only a third of the group was present; therefore, they will delay their recommendations until they have engaged with the other members (in the next few weeks). She stated that it was evident a foundational framework existed between intertwining threats and incident management. The group wanted to see more engagement with stakeholders, partners

(especially in wastewater), and practitioners that can be mediated by professional associations. Given the integration of the physical and social sciences, the decision support tools require more integration between decision-making and the social/economic landscape in which it takes place. Regarding the second charge question, the group noted the strength of elevating community resilience and larger community engagement, which will be needed for unknown hazards on the horizon, such as the Russian conflict, and potential radiological or nuclear hazards.

Ms. Kathy Jacobs, Director for the Center for Climate Adaptation Science and Solutions (CCASS), summarized the work of the Water Resources working group. Ms. Jacobs noted that the agenda seemed overly ambitious, there were many topics, and there may not be sufficient resources to handle them all. She stated there was more human emphasis than environmental, and she found it problematic that wildfires were not mentioned in this section. Ms. Jacobs also stated that although there are EPA territory pieces, there needs to be more delineation of territories wherein EPA leads compared to other agencies.

Dr. G. Allen Burton, Professor of Environment at the University of Michigan, highlighted the importance of climate issues and EJ. He noted that attempts would not work without collaboration between agencies and more structure.

Dr. Paul Gilman assigned Mr. Tom Tracy to follow up with the groups about when and how to interact with EPA. Dr. Bruce Rodan clarified timeline issues and summarized historical StRAP issues. He then asked for any questions.

Mr. Tom Tracy named himself as the point of contact for SharePoint issues and will reach out to coordinate EPA meetings.

Adjourn Meeting

The meeting adjourned at 5:00 PM, Eastern Time.

Meeting Agenda and Other Meeting Materials

The [agenda](#)¹ and other meeting materials can be accessed at [BOSC Executive Committee Meeting: May 2022 | US EPA](#).

Meeting Participants

BOSC Executive Committee Members:

Paul Gilman, *Chair*
Lucinda Johnson, *Vice Chair*
Richard Becker
Laureen Monica Boles
G. Allen Burton
Michelle Crimi
Bart Croes
Gilbert Gee
Jay Golden
Katharine Jacobs
Daland Juberg
Rainer Lohmann
Jaime Madrigano
Ellen Mantus
Pamela McElwee
Jayne Morrow
Anjali Mulchandani
Olga Naidenko
Barrett Ristroph
Derek Shendell
Justin Teegarden
Dana Tulis
Stephen Weisberg
John White
Mahmoud Saleh
Kevin Teichman
George Thurston
Crystal Upperman
Tracey Woodruff

EPA Designated Federal Officer (DFO): Tom Tracy, Office of Science Advisor, Policy, and Engagement

¹ [BOSC StRAP 4 Review - Final Draft Agenda 4-28-22.pdf \(epa.gov\)](#)

Presenters:

Kacee Deener, *Acting Deputy Director, Office of Science Advisor, Policy, and Engagement*
Chris Frey, *Deputy Assistant Administrator, Office of Research and Development*
Annette Guiseppi-Elie, *National Program Director, Chemical Safety for Sustainability Research Program*
Bryan Hubbell, *National Program Director, Air Climate and Energy Research Program*
Samantha Jones, *National Program Director, Health and Environmental Risk Assessment Research Program*
Michelle Latham, *Outreach and Stakeholder Engagement Lead, Office of Research and Development*
Bruce Rodan, *Associate Director for Science, Office of Research and Development*
Shawn Ryan, *National Program Director, Homeland Security Research Program*
Suzanne van Drunick, *National Program Director, Safe and Sustainable Water Resources Research Program*
Tim Watkins, *National Program Director, Sustainable and Healthy Communities Research Program*

Other EPA Attendees:

Dinora Arana	Richard Judson	Jocelyn Pierro
Heidi Bethel	Whitney King	Anne Rea
Susanna Blair	Patrick Kinney	Leslie Reed
Hannah Boone	Matt Klasen	Mary Ross
Susan Burden	Thomas Knudsen	Marie Schneider
Elaine Cohen Hubal	Taylor Lass	Angie Shatas
Tim Collins	Sang Don Lee	Bernice Smith
Jana Compton	Woo Hyoung Lee	Darcie Smith
Jessica Daniel	Monica Linnenbrink	Elizabeth Stanziano
Kathie Dionisio	Charles Maurice	Avery Tatters
Steven Dutton	Sarah Mazur	Russell Thomas
Andrew Gillespie	Andy Miller	Emily Trentacoste
Alison Harrill	Andra Morgan	Sean Watford
Cheryl Hawkins	Romell Nandi	Joe Williams
Maria Hegstad	Teresa Norberg-King	Douglas Young
Sherri Hunt	Beth Owens	Robert Zucker

Other Attendees:

Daria Antonova	Jenifer Hijazi	Annette Rohr
Canden Byrd	Juleen Lam	Michael Schmeltz
Brian Chalfant	Kevin Lanza	Sandy Smith
Aliza Furneaux	Rebecca Miserendio	Sean Smith
Charlette Geffen	Ed Monachino	Monica Schoch-Spana
Earl Gray	Matthew Naud	Craig Updyke
Edward Hackney	Ed Roehl	Allen Vickers

Donna Corhees
Sunny Wescott

Michael Wichman
Linda Wilson

Nestoria Wright

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Grace Cooney
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Leah West